PRODUCTION OPERATIONS

LAST UPDATE September 2016

GENERAL

P-100 **ARE PRESSURE-RECORDER DEVICES USED TO DETERMINE THE CURRENT OPERATING PRESSURE RANGES MAINTAINED AT THE LESSEE'S NEAREST OCS FIELD OFFICE?**

Authority: 30 CFR 250.851(b) **Enforcement Actions: W**
30 CFR 205.852(a)(2)
30 CFR 250.865(b)
30 CFR 250.858(b)

RATIONALE: Pressure-recorder devices are used to document the current operating ranges on the platform. Once this range is determined, the activation pressure for each PSH and PSL is established by the lessee. This pressure is checked when the operation test of a PSH or PSL is performed.

Note: The pressure recording devices must document the pressure range during a time interval of no less than 4 hours and no more than 30 days.

INSPECTION PROCEDURES:

Review operator individual well records, production records, surface pressure records, monthly inspection records maintained by the operator, and pressure recorder devices for each pressure safety device to verify that:

1. Operating pressure ranges to assure maximum safety of operation have been established.
2. Pressure safety device ranges are documented by pressure recorder devices.
   A. Charts reflect actual pressures recorded under normal operations.
   B. Charts graduated in psi so that current maximum high and low pressure ranges are established.
   C. Charts dated and test periods identified.
   D. Legible.
3. Ensure new ranges have been established anytime the normalized system pressures changes by 50 psig or 5 percent whichever is greater.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when charts are not:

1. Available for all pressure safety devices.
2. Current.
3. Legible.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-101 **DO ALL SAFETY SHUTDOWN DEVICES, VALVES, AND PRESSURE SENSORS FUNCTION IN A MANUAL RESET MODE?**

Authority: 30 CFR 250.853(a) **Enforcement Actions: C**

INSPECTION PROCEDURE:

Verify that each safety device functions in a manual reset mode by performing an actuation test.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC for the component protected by the safety device when it will not operate in a manual reset mode.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per component inspected

P-102 **DO END-DEVICES (I.E., SHUTDOWN DEVICES, SHUTDOWN VALVES, SSVs, AND OTHER SHUTDOWN CONTROLS) PERFORM THEIR DESIGNED FUNCTION UPON RECEIVING A SIGNAL (PNEUMATIC OR ELECTRONIC) TRANSMITTED BY A SENSOR THAT HAS DETECTED AN ABNORMAL CONDITION?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**

Notes:

1. Do not issue INC if end devices are approved for operator use only.
2. Only one INC is to be issued for one end-device that protects more than one component (i.e., suction of multiple pipeline pumps that are protected by one shutdown valve).

INSPECTION PROCEDURES:

1. Verify that each end-device performs its designed function upon receiving a signal from a sensor or sensors that have detected an abnormal condition.
2. Verify that each end device does not exceed 45 seconds to close upon receiving a signal from a sensor or sensors that have detected an abnormal condition in accordance with API RP 14C, Appendix C.2.1.4.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if an end-device (i.e., shutdown device, shutdown valve, SSV, or other shutdown control) fails to perform its designed function upon receiving a signal (pneumatic or electronic) that is transmitted by a sensor (i.e., PSHL, LSHL, ESD, TSE or other approved sensors) that has detected an abnormal condition.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per component inspected

P-103 **IS EACH SURFACE OR SUBSURFACE SAFETY DEVICE, WHICH IS BYPASSED OR BLOCKED OUT OF SERVICE, OUT OF SERVICE DUE TO START-UP, TESTING, OR MAINTENANCE AND IS IT FLAGGED AND MONITORED BY PERSONNEL?**

Authority: 30 CFR 250.869(a) **Enforcement Actions: C**

30 CFR 250.1004(c)

Note: Monitoring may also be conducted through the use of computer-based technology systems.

INSPECTION PROCEDURES:

1. Visually inspect the safety system and identify safety device(s) that are bypassed or blocked out of service and observe to see if they are flagged and monitored by personnel.
2. Discuss out of service safety devices with the operator to verify that each is out of service only due to start-up, maintenance, or testing.
3. Verify that only a minimum number of safety devices are taken out of service.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC for the component protected by the safety device when the safety device is out of service for reasons other than for maintenance, start-up, or testing, and is not flagged or monitored by personnel.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per device inspected

P-104 **IS THE PLATFORM PROTECTED WITH A BASIC AND ANCILLARY SURFACE SAFETY SYSTEM DESIGNED, ANALYZED, INSTALLED, TESTED, AND MAINTAINED IN OPERATING CONDITION IN ACCORDANCE WITH THE PROVISIONS OF API RP 14C RECOMMENDED PRACTICE FOR ANALYSIS, DESIGN, INSTALLATION, AND TESTING OF BASIC SURFACE SAFETY SYSTEMS FOR OFFSHORE PRODUCTION PLATFORMS (INCORPORATED BY REFERENCE AS SPECIFIED IN 30 CFR 250.198).**

Authority: 30 CFR 250.841(a) **Enforcement Actions: W/C/S**

INSPECTION PROCEDURES:

1. View operator's records to verify that all process component safety devices and their function performed have been integrated into their safety system.
2. View operator's records to verify the safety device set points have been determined and listed for the various process components.
3. View operator's records to verify that before a production system is placed in initial operation, or when re-commissioning a platform after being shut in for 30 days or more, or when a modification is made to the plat form safety system, the complete safety system should be thoroughly checked to verify that each device is installed, operable, performs its design function and, if applicable, is calibrated for the specific operating conditions.
4. Visually inspect end devices (i.e., shutdown devices, shutdown valves; SSVs, and other shutdown controls) to ensure the following properties of a good pneumatic supply are met:
   A. Free of liquid hydrocarbons.
   B. Free of water and water vapor.
   C. Free of solids.
   D. Non-corrosive.
5. Visually inspect all regulators for signs of contaminated pneumatic supply.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when:

1. The operator's records do not indicate that the complete safety system was checked prior to initial operations, or when re-commissioning a platform after being shut in for 30 days or more, or when a modification is made to the platform safety system, but monthly safety device testing is current.
2. The pneumatic supply system is found to be contaminated but did not affect end device's ability to perform its design function.

Issue a component (C) INC for the affected component:

1. When the operator's records do not indicate that performance function testing of the component was conducted after a modification and monthly safety device testing of the affected component has not been performed since the modification.
2. The Operator's records do not indicate that the entire shutdown or control circuit, including the final shutdown valve or control device was checked annually to verify that each device performs its design function and monthly safety device testing including ESD testing has not been performed prior to the end of the calendar year.
3. When the pneumatic supply system is found to be contaminated and the affected end devices are unable to perform their design function.

Note: Structure shut in only applies to new facilities installed and placed on production as of January 2015.

Issue a structure shut in (S) INC when:

1. The operator initiated production prior to requesting a BSEE pre-production inspection and records do not indicate that the complete safety system was checked to verify that each device was installed, operable, performed its design function and, if applicable, was calibrated for the specific operating conditions before the production system was placed in initial operation and monthly safety device testing including ESD testing has not been performed.
2. BSEE finds through function testing and/or investigation that the pneumatic supply system is contaminated, experienced liquid carryovers, and deems this to be the probable cause of system failures and/or an undesirable event and the operator has not implemented a corrective action plan to eliminate this issue.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-105 **IS EACH OPEN-ENDED LINE CONNECTED TO PRODUCING FACILITIES AND WELLS PLUGGED OR BLIND-FLANGED?**

Authority: 30 CFR 250.869(d) **Enforcement Actions: W/C**

Note: Except those lines designed to be open-ended such as flare or vent lines.

INSPECTION PROCEDURES:

1. Visually inspect the entire production process system and wells to identify all open-ended lines.
2. Determine the function of each open-ended line by physically tracing the piping as is on the facility and comparing the piping to the flow diagram.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a line is not intended to be open-ended, is not plugged or blind-flanged, and discharge is not occurring.

Issue a component shut-in (C) INC for the component upstream of the open-ended line when it is not intended to be open-ended, is not plugged or blind-flanged, and discharge is occurring.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-106 **IS NON-METALLIC PIPING SUCH AS POLYVINYL CHLORIDE, CHLORINATED POLYVINYL CHLORIDE, AND REINFORCED FIBERGLASS USED ONLY ON ATMOSPHERIC AND NON-HYDROCARBON SERVICE OVERBOARD WATER PIPING?**

Authority: 30 CFR 250.868 **Enforcement Actions: C**

INSPECTION PROCEDURE:

Verify non-metallic piping is used only on atmospheric and non-hydrocarbon service overboard water piping.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (**C**) INC when non-metallic piping is used anywhere other than on atmospheric and non-hydrocarbon service overboard water piping.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

FLARING AND VENTING OF GAS

P-107 **HAS APPROVAL BEEN RECEIVED WHEN THE OPERATOR HAS FLARED OR VENTED OIL-WELL GAS OR GAS-WELL FLASH GAS IN EXCESS OF 48 CONTINUOUS HOURS OR 144 CUMULATIVE HOURS DURING ANY MONTH WHEN EQUIPMENT FAILS TO WORK PROPERLY, DURING EQUIPMENT MAINTENANCE AND REPAIR, OR TO RELIEVE SYSTEM PRESSURES?**

Authority: 30 CFR 250.1160(a)(6)(i) **Enforcement Actions: W/C**
30 CFR 250.1160(a)(6)(iii)
30 CFR 250.1160(a)(7)(i)
30 CFR 250.1160(a)(7)(iii)

Note: Gas well flash gas is natural gas released from condensate as a result of a decrease in pressure, an increase in temperature or both.

INSPECTION PROCEDURE:

Review flaring or venting records to determine if continuous flaring or venting of oil-well gas or gas-well flash gas has exceeded 48 hours of cumulative flaring or venting of oil well gas has exceeded 144 hours during any calendar month without prior approval.

IF NONCOMPLIANCE EXISTS:

Issue one warning (W) INC for an audit of flaring or venting operations if flaring or venting has ceased but records indicate that 48 continuous hours or the 144 cumulative hours have been exceeded during a month without approval.

Issue one component shut-in (C) INC for one or more affected wells if flaring or venting is ongoing and records indicate that, in the current month, 48 continuous hours or the 144 cumulative hours have been exceeded without approval, upon instructions from the appropriate supervisor.

Note: The affected well is the component.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility audited

P-108 **HAS APPROVAL BEEN RECEIVED WHEN THE OPERATOR HAS FLARED OR VENTED PRIMARY GAS-WELL GAS IN EXCESS OF 2 CONTINUOUS HOURS WHEN EQUIPMENT FAILS TO WORK PROPERLY, DURING EQUIPMENT MAINTENANCE AND REPAIR, OR TO RELIEVE SYSTEM PRESSURES?**

Authority: 30 CFR 250 1160(a)(6)(ii) **Enforcement Actions: W/C**
30 CFR 250 1160(a)(7)(ii)

Note: Gas well gas is natural gas from a gas well completion that is at or near its wellhead pressure; this does not include flash gas.

INSPECTION PROCEDURE:

Review flaring or venting records to determine if continuous flaring or venting of gas-well gas has exceeded 2 hours of continuous flaring or venting without prior approval of the Regional Supervisor.

IF NONCOMPLIANCE EXISTS:

Issue one warning (W) INC for an audit of flaring or venting operations if flaring or venting has ceased but records indicate that 2 continuous hours have been exceeded without approval.

Issue one component shut-in (C) INC for one or more affected wells if flaring or venting is ongoing and records indicate that 2 continuous hours have been exceeded without approval, upon instructions from the appropriate supervisor.

Note: The affected well is the component.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility audited

P-109 **HAS THE OPERATOR RECEIVED APPROVAL WHEN FLARING OR VENTING GAS, BEYOND THE THRESHOLDS ALLOWED TO BURN WASTE PRODUCTS SUCH AS H2S, OR TO RESTART A FACILITY THAT WAS SHUT IN BECAUSE OF WEATHER CONDITIONS SUCH AS A HURRICANE, OR HAVE THEY REPORTED THE BLOWDOWN OF A TRANSPORTATION PIPELINE DOWNSTREAM OF THE ROYALTY METER WITHIN 72 HOURS?**

Authority: 30 CFR 250.1160(a)(1) **Enforcement Actions: W/C**
30 CFR 250.1160(a)(2)
30 CFR 250.1160(a)(3)(i)

INSPECTION PROCEDURES:

Review daily records to determine if the gas has been flared or vented beyond the regulatory thresholds without approval.

1. When the gas is lease use gas (produced natural gas which is used on or for the benefit of lease operations such as gas used to operate production facilities) or is used as an additive necessary to burn waste products such as H_2S, the volume may not exceed amount necessary for its intended purpose.
2. During the restart of a facility that was shut in because of weather conditions, such as a hurricane, flaring or venting may not exceed 48 cumulative hours without approval.
3. During the blow down of transportation pipelines downstream of the royalty meter; location, time, flare/vent volume and reason for flaring/venting must be reported within 72 hours after the incident is over.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if flaring or venting of gas has ceased but records indicate that gas has been flared or vented beyond the thresholds. Issue a component shut-in (C) INC if flaring or venting is ongoing and records indicate that flaring or venting beyond the thresholds, upon instructions from the appropriate supervisor.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-110 **DOES THE OPERATOR HAVE APPROVAL TO FLARE OR VENT GAS BEYOND 48 CUMULATIVE HOURS PER UNLOADING OR CLEANING OR TESTING OPERATION ON A SINGLE COMPLETION?**

Authority: 30 CFR 250.1160(a)(4) **Enforcement Actions: W/C**

Note: A downhole commingled zone is considered a single completion.

INSPECTION PROCEDURE:

Review reports to determine if operator has flared or vented oil-well or gas-well gas beyond 48 cumulative hours during the testing, cleaning, or unloading of a well without prior approval.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if flaring or venting of gas during testing, cleaning, or unloading of a well has ceased but the records indicate that 48 cumulative hours have been exceeded.

Issue a component shut-in (C) INC if flaring or venting is ongoing and records indicate that 48 cumulative hours have been exceeded without approval, upon instructions from the appropriate supervisor.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-112 **HAS THE OPERATOR VERIFIED THAT OIL-WELL GAS AND/OR GAS-WELL GAS VAPORS FLARED OR VENTED FROM STORAGE VESSELS OR OTHER LOW PRESSURE PRODUCTION VESSELS AVERAGE NO MORE THAN 50 MCF/DAY DURING A CALENDAR MONTH AND THAT THESE SMALL VOLUMES THAT CANNOT BE ECONOMICALLY RECOVERED?**

Authority: 30 CFR 250.1160(a)(5) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review flaring or venting records to determine if oil-well gas and/or gas-well gas has been flared or vented routinely (with all equipment working properly) totaling a volume at the facility of more than 50 MCF/day from storage vessels or other low pressure production vessels.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if flaring and venting records verify that flaring and/or venting of more than 50 MCF/day (unrelated to upsets) has occurred during any calendar month and the Regional Supervisor has not approved this volume to be uneconomical to recover.

Issue a component shut-in (C) INC upon instructions from the appropriate supervisor.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-113 **DOES THE OPERATOR MAINTAIN RECORDS FOR A MINIMUM OF 2 YEARS AT THE FACILITY DETAILING DAILY VOLUMES FLARED, VENTED, AND/OR LIQUID HYDROCARBONS BURNED; HOURS FLARED, VENTED, AND/OR BURNED, ON A DAILY AND MONTHLY CUMULATIVE BASIS; REASONS FOR FLARING, VENTING, AND/OR BURNING; WELLS CONTRIBUTING TO THE FLARING, VENTING, AND/OR BURNING ALONG WITH GAS-OIL RATIOS AND DOCUMENTATION OF ALL REQUIRED APPROVALS?**

Authority: 30 CFR 250.1163(c)(1) **Enforcement Actions: W**

30 CFR 250.1163(c)(3)(v)

INSPECTION PROCEDURE:

Verify that operator maintains flaring, venting, and liquid hydrocarbon burning records for a minimum of 2 years at the facility which outline volumes of gas flared or vented; hydrocarbons burned; hours flared, vented, and/or burned; reasons for flaring, venting, or burning; wells contributing to the flaring, venting, and/or burning along with gas-oil ratios and documentation of all required approvals.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC for records if:

1. Operator has not maintained gas flaring, venting and/or liquid hydrocarbon burning records for a minimum of 2 years on the facility.
2. Gas flaring, venting and/or liquid hydrocarbon burning records do not include all information addressed above.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-114 **FOR FACILITIES THAT PROCESS MORE THAN AN AVERAGE OF 2,000 BOPD IN A CALENDAR MONTH, HAS THE OPERATOR INSTALLED FLARE/VENT METERS WITHIN 120 DAYS AFTER THE END OF THE MONTH IN WHICH THE AVERAGE AMOUNT OF OIL PROCESSED EXCEEDS 2,000 BOPD, AND DOES THE OPERATOR MAINTAIN METER CALIBRATION AND MAINTENANCE RECORDS, AND METER RECORDINGS DETAILING BEGINNING TIMES, END TIMES AND VOLUMES FOR ALL FLARING AND VENTING INCIDENTS, FOR A MINIMUM OF 2 YEARS AT THE FACILITY?**

Authority: 30 CFR 250.1163(a) **Enforcement Actions: W/C**
30 CFR 250.1163(d)

INSPECTION PROCEDURES:

Verify that:

1. Flare/vent meters are installed within 120 days after the end of the month in which the average amount of oil processed exceeds 2,000 bopd.
2. Operator maintains meter calibration and maintenance records and meter recordings detailing beginning times, end times and volumes for all flaring and venting incidents, meter calibration records for a minimum of 2 years on the facility.
3. Flare/vent meter calibration is done in accordance with manufacturer's recommendation, or at least once every year, whichever is shorter.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC for records if:

1. Operator has not maintained flare/vent meter records and meter calibration and maintenance records for a minimum of 2 years on the facility.
2. Flare/vent meter records do not include all information addressed above.

Issue a component shut-in (C) INC if flare/vent meter/s are not installed within 120 days after the end of the month in which the average amount of oil processed exceeds 2,000 bopd, upon instructions from the appropriate supervisor.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

PRODUCTION NOTIFICATION

P-120 **HAS THE DISTRICT MANAGER BEEN NOTIFIED, PRIOR TO THE COMMENCEMENT OF PRODUCTION, WHEN A FACILITY IS READY FOR A PREPRODUCTION TEST AND AN INSPECTION OF THE INTEGRATED SAFETY SYSTEM?**

Authority: 30 CFR 250.880(a) **Enforcement Actions: C/S**

INSPECTION PROCEDURE:

Verify that the District Manager has been notified that a facility is ready for a preproduction test and an inspection of the integrated safety system, prior to commencement of production from that well.

IF NONCOMPLIANCE EXISTS:

Issue one component shut-in (**C**) INC for the integrated safety system or newly installed equipment if the District Manager has not been notified by the lessee as required.

Issue one facility shut-in (**S**) INC for the facility if the District Manager has not been notified by the lessee that the facility is ready for a preproduction test.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-121 **DID THE OPERATOR RECEIVE APPROVAL FROM THE APPROPRIATE DISTRICT MANAGER PRIOR TO INSTALLING TEMPORARY QUARTERS ON OCS FACILITIES?**

Authority: 30 CFR 250.867(a) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Verify operator received District Manager approval prior to installing temporary quarters.

IF NON-COMPLIANCE EXISTS:

Issue a warning (W) INC if the Operator did not receive approval prior to installing temporary quarters but the temporary quarters are in compliance and placed in a safe location.

Issue a (C) INC if the operator did not receive approval prior to installing temporary quarters, and the quarters are not in compliance or place in a hazardous location.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue INC per temporary quarters checked

P-122 **DID THE OPERATOR RECEIVE APPROVAL FROM THE APPROPRIATE DISTRICT MANAGER PRIOR TO USING TEMPORARY EQUIPMENT ASSOCIATED WITH THE PRODUCTION PROCESS SYSTEM, INCLUDING EQUIPMENT USED FOR WELL TESTING AND/OR WELL CLEAN-UP?**

Authority: 30 CFR 250.867(c) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Verify operator received District Manager approval prior to using temporary equipment.

IF NON-COMPLIANCE EXISTS:

Issue a warning (W) INC if the Operator did not receive approval prior to using temporary equipment, but the equipment in compliance with regulations and is placed in a safe location.

Issue a (C) INC if the operator did not receive approval prior to using temporary equipment and if equipment is out of compliance or placed in a hazardous location.

INSPECTION COUNT/INC COUNT:

Enter one item checked/Issue INC per temporary equipment checked

FIRE WATER SYSTEM

P-130 **IS AN APPROVED FIREWATER SYSTEM, CONSISTING OF RIGID PIPE WITH FIRE-HOSE STATIONS OR FIXED FIREWATER MONITORS, OR IS AN OPERABLE CHEMICAL SYSTEM, APPROVED BY THE DISTRICT MANAGER, INSTALLED TO PROVIDE PROTECTION IN ALL AREAS WHERE PRODUCTION-HANDLING EQUIPMENT IS LOCATED?**

Authority: 30 CFR 250.859(a) **Enforcement Actions: S**
30 CFR 250.860

DEFINITION: Production handling equipment are wellheads, separators, scrubbers, treaters, compressors, pipeline pumps, generators, skimmers, tanks and heaters.

Notes:

1. As a minimum, the firewater pump should be sized to deliver 180 gpm (11.36 ccs). The firewater system should deliver water at the pressure recommended by the nozzle manufacturer, or at least 75 psi (5.17 bar) when two hose streams are flowing.
2. A chemical system shall not be approved in lieu of a firewater system in an enclosed well bay area.

INSPECTION PROCEDURES:

1. Firewater system:
   A. Visually inspect areas where production-handling equipment is located to verify that firewater systems of rigid pipe and hose stations are installed per the District Manager's approval.
   B. Request that operator initiate actuation test of all fire water systems and pumps on facility.
2. Chemical system:
   A. Visually inspect the area where production-handling equipment is located to verify that chemical systems are installed per the District Manager's approval.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (**S**) INC if:

1. The firewater system does not operate as required.
2. The firewater system is not of rigid pipe with hose stations installed in areas where production-handling equipment is located.
3. The chemical system does not operate as required.
4. The chemical system is not as approved.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-131 **IS A FIXED WATER SPRAY SYSTEM INSTALLED IN ENCLOSED WELL-BAY AREAS WHERE HYDROCARBON VAPORS MAY ACCUMULATE?**

Authority: 30 CFR 250.859(a) **Enforcement Actions: S**

DEFINITION: Enclosed Areas are defined as those areas confined on more than 4 of their 6 possible sides by walls, floors, or ceilings more restrictive to air flow than grating or fixed open louvers and of sufficient size to allow entry of personnel.

INSPECTION PROCEDURES:

1. Inspect each well-bay area to determine if it is enclosed.
2. Visually inspect the well-bay area to determine that fixed fire-water piping and spray nozzles are installed.
3. Start the fire water pump and test the system for operation.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC if any component of the fire-water system fails to operate or is not installed.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-132 **IS FUEL OR POWER FOR FIREWATER PUMP DRIVERS AVAILABLE FOR AT LEAST 30 MINUTES OF RUN TIME DURING A PLATFORM SHUT-IN, AND ARE ALL NEW FIREWATER PUMP DRIVERS EQUIPPED WITH AUTOMATIC STARTING CAPABILITIES UPON ACTIVATION OF THE ESD?**

Authority: 30 CFR 250.859(a)(2) **Enforcement Actions: S**

Note: As of September 7, 2017, operators must have equipped all new firewater pump drivers with automatic starting capabilities upon activation of the ESD, fusible loop, or other fire detection system.

INSPECTION PROCEDURES:

1. Diesel powered firewater pump: Conduct an operational test to verify 30-minute run time when the operator cannot verify by records the 30- minute run time.
2. Natural gas powered firewater pump: Actuation of the emergency shutdown system or the fire loop system effects shutdown of all wells and production processes. Continued operation of the natural gas powered fire-fighting systems necessitates utilizing the trapped volume sufficient to provide the 30-minutes run time. Conducted an operational test to verify the 30- minute run time when the operator cannot verify by records the 30-minute run time.
3. Electric power firewater pump(s): Verify available power source and activate the pump to assure proper operation.
   A. Electric generating stations located on the facility shall permit continued operation for 30-minute run time.
   B. Electric generating stations located on facilities other than the one being inspected shall permit continued operation for 30-minute run time although the platform is shut in.
4. As of September 7, 2017, verify all new firewater pump drivers have automatic starting capabilities upon activation of the ESD, fusible loop, or other fire detection system.

IF NONCOMPLIANCE EXISTS:

1. No provision exists for continued operations of fire-water system for 30-minute run time.
2. As of September 7, 2017, all new firewater pump drivers do not have automatic starting capabilities upon activation of the ESD, fusible loop, or other fire detection system.

INSPECTION COUNT/INC COUNT:

Enter one item checked/ issue one INC per facility inspected

P-133 **IS A DIAGRAM OF THE FIREFIGHTING SYSTEM SHOWING THE LOCATION OF ALL FIREFIGHTING EQUIPMENT POSTED IN A PROMINENT PLACE ON THE FACILITY?**

Authority: 30 CFR 250.859(a)(3) **Enforcement Actions: W**

Note: Diagrams for single- and multi-well satellite structures, and for unmanned structures that are not equipped with enclosures, must be maintained in the Field Quarters Building in a prominent location.

INSPECTION PROCEDURE:

Verify that a diagram of the firefighting system showing the location of all firefighting equipment is posted in a prominent place on the facility.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if a diagram showing all of the firefighting equipment is not posted in a prominent place on the facility being inspected.

INSPECTION COUNT/INC COUNT:

Enter one item checked/ issue one INC per facility inspected

P-134 **WHEN FOAM FIREFIGHTING SYSTEMS ARE INSTALLED AS PART OF THE FIREFIGHTING SYSTEM THAT PROTECTS PRODUCTION HANDLING AREAS, DID THE OPERATOR CONDUCT ANNUAL INSPECTIONS OF THE FOAM CONCENTRATES AND THEIR TANKS OR STORAGE CONTAINERS FOR EVIDENCE OF EXCESSIVE SLUDGING OR DETERIORATION AND SEND SAMPLES OF THE FOAM CONCENTRATE TO THE MANUFACTURER OR AUTHORIZED REPRESENTATIVE FOR QUALITY CONDITION TESTING?**

Authority: 30 CFR 250.861 **Enforcement Actions: W/C**

Notes:

1. Annual means not to exceed 12 months.
2. In lieu of sampling and certification, the operator may choose to replace the total inventory of foam with suitable new stock.

INSPECTION PROCEDURES:

1. Verify operator conducted annual inspections of the foam concentrates and their tanks or storage containers for evidence of excessive sludging or deterioration.
2. Verity operator sent samples of the foam concentrate to the manufacturer or authorized representative for quality condition testing, and the certification document is readily accessible for field inspection.

IF NON-COMPLIANCE EXISTS:

Issue a warning (W) INC if:

Operator did not conduct an annual inspection of the foam concentrates and their tanks or storage containers for evidence of excessive sludging or deterioration.

Issue a component (C) INC if:

Operator did not submit samples of the foam concentrate to the manufacturer or authorized representative for quality condition testing, and the certification document is not accessible for field inspection.

INSPECTION COUNT/INC COUNT:

Enter one item checked/Issue INC per facility checked

GAS-DETECTION SYSTEM

P-150 **ARE CONTINUOUSLY MONITORING GAS-DETECTION SYSTEMS INSTALLED IN ALL INADEQUATELY VENTILATED, ENCLOSED CLASSIFIED AREAS, AND SIGNAL AN ALARM AT NO GREATER THAN 25 PERCENT LEL, INITIATING A SHUT-IN SEQUENCE (MANUAL-RESET TYPE) WHEN LEVELS REACH NO MORE THAN 60 PERCENT LEL?**

Authority: 30 CFR 250.862(a) **Enforcement Actions: W/C**
30 CFR 250.862(b)

DEFINITIONS:

1. Adequate ventilation is a change of air volume each 5 minutes or 1 cubic foot of air-volume flow per minute per square foot of solid floor area, whichever is greater.
2. Enclosed area is any area confined on more than four of its six possible sides by walls, floors, or ceilings more restrictive to air flow than grating or fixed open louvers and of sufficient size to allow entry of personnel.
3. Classified area is identified in Appendix 21 of the National PINC List.

Note: As referenced in API RP 14C, LEL gas-detection systems will be required to sound an audible alarm at 25 percent LEL, and initiate shut-in of gas source SDV's at 60 percent LEL.

INSPECTION PROCEDURES:

1. Identify the inadequately ventilated classified areas.
2. Visually inspect each identified area to verify that it is equipped with at least one gas sensor.
3. Inspect each gas-detection system to verify that it has an automatic backup power source and is capable of continuous monitoring.
4. Verify that combustible gas-detection systems related to the higher gas concentration levels are of the manual-reset type.
5. Verify that combustible gas-detection systems perform their designated function in accordance with API RP 14C.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a gas sensor is omitted and shut-in action would result in discontinued operation of emergency electric generating stations and firefighting system.

Issue a component shut-in (C) INC for the components protected by the gas monitoring equipment when:

1. An inadequately ventilated, enclosed classified area is not equipped with a gas sensor or is not capable of continuous monitoring.
2. The combustible gas-detection systems related to the higher gas concentration levels automatically reset after reaching 60 percent LEL or fail to sound an alarm at 25 percent and/or initiate a shut-in at 60 percent LEL.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-153 **IS A FUEL-GAS ODORANT OR AN AUTOMATIC GAS-DETECTION AND ALARM SYSTEM INSTALLED IN ENCLOSED, CONTINUOUSLY MANNED AREAS OF THE FACILITY WHICH ARE PROVIDED WITH FUEL GAS?**

Authority: 30 CFR 250.862(c) **Enforcement Actions: W/C**

DEFINITION: Enclosed Area is any area confined on more than four of its six possible sides by walls, floors, or ceilings more restrictive to air flow than grating or fixed open louvers and of sufficient size to allow entry of personnel.

INSPECTION PROCEDURE:

Verify that each enclosed, continuously manned area that is provided with fuel gas is protected by either a fuel gas odorant or an automatic gas-detection and alarm system.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a shut-in action would result in discontinued operation of emergency electric generating stations or firefighting systems.

Issue a component shut-in (C) INC for the source of the fuel gas when an enclosed, continuously manned area that receives fuel gas without an odorant is not equipped with an automatic gas-detection and alarm system.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per each system inspected

P-154 **IS EACH GAS-DETECTION SYSTEM INSTALLED IN ACCORDANCE WITH API RP 14C, API RP 14G, AND API RP 14F?**

Authority: 30 CFR 250.862(e) **Enforcement Actions: C**

INSPECTION PROCEDURES:

Inspect to verify that each gas-detection system is installed in accordance with API RP 14C, API RP 14G, and API RP 14F which require that:

1. Each combustible gas-detection control unit shall be installed outside the monitored area if the area contains a source of hydrocarbons.
2. Each compressor building shall have a minimum of two sensors installed.
3. A gas-detection system capable of monitoring more than one area identifies the source of the warning signal.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC for the component protected by the gas-detection system when the system is not installed as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each system inspected

P-155 **IS EACH COMBUSTIBLE GAS-DETECTION SYSTEM CALIBRATED AT LEAST ONCE EVERY 3 MONTHS?**

Authority: 30 CFR 250.880(c)(3)(ii) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each gas-detection system has been calibrated at least once within the last 3 months.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that each gas-detection system has been calibrated at the required interval.

Issue a component shut-in (C) INC for the component(s) protected by the gas-detection system when the system has not been calibrated within the required interval.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each system inspected

FIRE-DETECTION SYSTEM

P-170 **ARE FIRE (FLAME, HEAT, OR SMOKE) SENSORS OF THE CONTINUOUS MONITORING TYPE AND EQUIPPED WITH A MANUAL RESET INSTALLED IN ALL ENCLOSED CLASSIFIED AREAS?**

Authority: 30 CFR 250.862(a) **Enforcement Actions: W/C**
30 CFR 250.862(b)

DEFINITIONS:

1. Enclosed area is any area confined on more than four of its six possible sides by walls, floors, or ceilings more restrictive to air flow than grating or fixed open louvers and of sufficient size to allow entry of personnel.
2. Classified area is identified in Appendix 21 of the National PINC List.

Note: When a UV system is used, it must provide complete coverage of the area.

INSPECTION PROCEDURES:

1. Identify the enclosed classified areas.
2. Visually inspect each identified area to verify that it is equipped with at least one fire sensor.
3. Inspect each fire-detection system to verify that it has a backup power source.
4. Inspect to verify that the fire-detection system is a manual-reset type (non-automatic).

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a fire sensor is omitted and shut-in action would result in discontinued operation of emergency electric generating stations and firefighting system.

Issue a component shut-in (C) INC for:

1. The area when the enclosed classified area is not equipped with a fire sensor.
2. The components protected by the fire monitoring equipment when the fire-detection system does not have a backup power source.
3. The component(s) protected by the system when the fire-detection system automatically resets after sounding alarm.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per each facility inspected

P-173 **IS EACH FIRE-DETECTION SYSTEM INSTALLED IN ACCORDANCE WITH API RP 14C, API RP 14G, AND API RP 14F?**

Authority: 30 CFR 250.862(e) **Enforcement Actions: C**

INSPECTION PROCEDURES:

Inspect to verify that each fire-detection system is installed in accordance with API RP 14C, API RP 14G, and API RP 14F, which require that:

1. Buildings in which personnel regularly or occasionally sleep are equipped with smoke and/or thermal detectors.
2. Rooms containing a heat source such as hot water heater, clothes dryer, kitchen range, oven, space heater, etc., are equipped with smoke and/or thermal detectors.
3. When smoke detectors are used, sensors be placed in individual sleeping rooms or spaced in corridors.
4. Smoke or thermal detectors are installed near each heat source.
5. Audible/visual fire alarm signals are distinctive from any other signal on the platform.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC for the component protected by the fire-detection system when the system is not installed as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each system inspected

P-175 **DOES ACTIVATION OF THE FIRE LOOP SYSTEM OR OTHER FIRE DETECTION SYSTEMS, OR AUTOMATIC DETECTION OF AN ABNORMAL CONDITION, INITIATE SURFACE AND SUBSURFACE SHUT-IN?**

Authority: 30 CFR 250.818(c) **Enforcement Actions: C/S**
30 CFR 250.841(a)

Note: Consideration should be given to avoid total platform shut-in, as well as those wells which have a history of problems returning to flow after extended periods of being shut-in.

INSPECTION PROCEDURE:

Initiate a test of the fire loop system in accordance with Appendix 10 of the National PINC List.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when a well or component fails to close within 45 seconds.

Issue a facility shut-in (S) INC when the fire loop system or other fire detection system fails to initiate surface and subsurface shut-in.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each system inspected

P-176 **IS EACH FIRE-DETECTION SYSTEM TESTED FOR OPERATION AND RE-CALIBRATED AT LEAST ONCE EVERY 3 MONTHS?**

Authority: 30 CFR 250.880(c)(3)(ii) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each fire-detection system has been tested and re-calibrated within the last 3 months.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that each fire-detection system has been tested and re-calibrated at the required interval, but the fire-detection system has been tested in the last 3 months. Issue a component shut-in (C) INC for the activity protected by the fire-detection system when:

1. Review of records does not verify that each fire-detection system has been tested and re-calibrated at the required interval and the fire-detection systems have not been tested in the last 3 months.
2. The system cannot be re-calibrated.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per each system inspected

P-177 **ARE OPEN FLAMES OR DEVICES OPERATING AT TEMPERATURES WHICH COULD IGNITE A METHANE-AIR MIXTURE NOT USED FOR TESTING?**

Authority: 30 CFR 250.880(c)(3)(ii) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Review with operator the method used to test each fire-detection system.
2. Inspect device used in test for presence of open flame or temperature that exceeds 1100 degrees F.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC for the activity protected by each fire-detection system when the testing device uses an open flame or exceeds 1100 degrees F.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

FUSIBLE MATERIAL

P-200 **IS A TSE LOCATED WHERE SPECIFIED BY TABLE C1 OF API RP 14C FOR WELLHEADS?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**

Note: P&A Wells and Dry Tree Wells do not have to be equipped with a TSE.

INSPECTION PROCEDURE:

Verify that each wellhead has a minimum of one TSE.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if each wellhead is not equipped with required TSE.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per each wellhead inspected

P-201 **IS A TSE LOCATED WHERE SPECIFIED BY TABLE C1 OF API RP 14C FOR HEADERS?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that there are at least two fusible plugs on each header.
2. Verify that there is one fusible plug for each 10 feet of header.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if each header is not equipped with required TSE.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per each header inspected

P-202 **IS A TSE LOCATED WHERE SPECIFIED BY TABLE C1 OF API RP 14C FOR PRESSURE VESSELS?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Vertical vessel:
   A. Verify that there is at least one fusible plug on each vessel.
   B. Verify that there is one fusible plug for each 12 inches of OD to a maximum of five.
2. Horizontal vessel (less than or equal to 48-inch OD):
   A. Verify that there are at least two fusible plugs on each vessel.
   B. Verify that there is one fusible plug for each 5 feet of length.
3. Horizontal vessel (greater than 48-inch OD):
   A. Verify that there are at least four fusible plugs on each vessel.
   B. Verify that there are two fusible plugs for each 5 feet of length in two parallel rows.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if each pressure vessel is not equipped with required TSE.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each vessel inspected

P-203 **IS A TSE LOCATED WHERE SPECIFIED BY TABLE C1 OF API RP 14C FOR ATMOSPHERIC VESSELS?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that there is one fusible plug above each process inlet.
2. Verify that there is one fusible plug above each process outlet.
3. Verify that there is one fusible plug above each hatch.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if each atmospheric vessel is not equipped with required TSE.

INSPECTION COUNT/ INC COUNT:

Enter one item checked/ issue one INC for each vessel inspected

P-204 **IS A TSE LOCATED WHERE SPECIFIED BY TABLE C1 OF API RP 14C FOR FIRED VESSELS AND EXHAUST HEATED COMPONENTS?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Vertical vessel:
   A. Verify that there is at least one fusible plug on each vessel.
   B. Verify that there is one fusible plug for each 12 inches of OD to a maximum of five.
   C. Verify that there is one fusible plug outside each flame arrester on fired components.
2. Horizontal vessel (less than or equal to 48-inch OD):
   A. Verify that there are at least two fusible plugs on each vessel.
   B. Verify that there is one fusible plug for each 5 feet of length.
   C. Verify that there is one fusible plug outside each flame arrester on fired components.
3. Horizontal vessel (greater than 48-inch OD):
   A. Verify that there are at least four fusible plugs on each vessel.
   B. Verify that there are two fusible plugs for each 5 feet of length in two parallel rows.
   C. Verify that there is one fusible plug outside each flame arrester on fired components.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if each fired vessel and exhaust heated component is not equipped with required TSE.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each vessel inspected

P-205 **IS A TSE LOCATED WHERE SPECIFIED BY TABLE C1 OF API RP 14C FOR HEAT EXCHANGERS?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**

INSPECTION PROCEDURE:

Verify that there is one fusible plug over each end of each heat exchanger.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if each heat exchanger is not equipped with required TSE.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each heat exchanger inspected

P-206 **IS A TSE LOCATED WHERE SPECIFIED BY TABLE C I OF API RP 14C FOR PUMPS?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**

30 CFR 250.1004(b)(9)

Note: This requirement does not apply to pumps that are not part of the production process system (e.g., firewater pump).

INSPECTION PROCEDURES:

1. Reciprocating - Verify that there is one fusible plug over each rod packing.
2. Centrifugal - Verify that there is one fusible plug over each packing box.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if each pump is not equipped with required TSE.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each pump inspected

P-207 **IS A TSE LOCATED WHERE SPECIFIED BY TABLE C1 OF API RP 14C FOR COMPRESSORS?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Reciprocating - Verify that there is one fusible plug over each rod cylinder.
2. Centrifugal - Verify that there is one fusible plug over compressor case.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if each compressor is not equipped with required TSE.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each compressor inspected

P-208 **IS A TSE LOCATED WHERE SPECIFIED BY TABLE C1 OF API RP 14C FOR ENGINES?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Spark ignition
   A. Verify that there is one fusible plug over each carburetor.
   B. Verify that there is one fusible plug over each fuel injector.
2. Diesel - Verify that there is one fusible plug over each fuel injector pump.
3. Combustion turbines
   A. Verify that there is one fusible plug over each fuel solenoid valve.
   B. Verify that there is one fusible plug over each governor valve.
   C. Verify that there is one fusible plug over each power take off pump.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (**C**) INC if each engine is not equipped with required TSE.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each engine inspected

P-209 **IS A FIRE DETECTION SYSTEM LOCATED IN ACCORDANCE WITH API RP 14 J APPENDIX B.1.1.2 FOR ELECTRIC MOTORS?**

Authority: 30 CFR 250.800 **Enforcement Actions: C**

30 CFR 250.901(a)(14)

INSPECTION PROCEDURE:

Verify that each electric motor-driven hydrocarbon handling unit has a fire detection system located in accordance with API RP 14 J appendix B.1.1.2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if each electric-driven motor is not equipped a TSE located in accordance with API RP 14 J appendix B.1.1.2

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per component inspected

P-210 **IS A TSE LOCATED WITHIN 5 FEET OF EACH BSDV?**

Authority: 30 CFR 250.835(d) **Enforcement Actions: C**

INSPECTION PROCEDURE:

Verify if TSE is installed within 5 feet of each BSDV.

IF NONCOMPLIANCE EXISTS:

Issue a component shut in (C) INC if TSE is not installed within 5 feet of the BSDV.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each BSDV inspected

ESD SYSTEM

P-231 **IS AN OPERABLE ESD STATION LOCOTED AT EACH HELICOPTER DECK?**

Authority: 30 CFR 250.855 **Enforcement Actions: S**

INSPECTION PROCEDURES:

1. Verify that there is an ESD station at each helicopter deck.
2. Verify operation of ESD station by testing in accordance with Appendix 10 of the National PINC List.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (**S**) INC when an ESD station:

1. Does not exist at the required location.
2. Does not operate properly.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-232 **IS AN OPERABLE ESD STATION LOCATED AT EACH EXIT STAIRWAY LANDING AT EACH DECK LEVEL?**

Authority: 30 CFR 250.855 **Enforcement Actions: S**

INSPECTION PROCEDURES:

1. Verify that there is an ESD station at each exit stairway landing at each deck level.
2. Verify operation of ESD station by testing in accordance with Appendix 10 of the National PINC List.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (**S**) INC when an ESD station:

1. Does not exist at the required location.
2. Does not operate properly.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-233 **IS AN OPEABLE ESD STATION LOCATED AT EACH BOAT LANDING?**

Authority: 30 CFR 250.855 **Enforcement Actions: S**

Note: Only ESD stations at the boat landing may utilize a loop of breakable synthetic tubing in lieu of a valve.

INSPECTION PROCEDURES:

1. Verify that there is an ESD station at each boat landing.
2. Verify operation of ESD station by testing in accordance with Appendix 10 of the National PINC List.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (**S**) INC when an ESD station:

1. Does not exist at the required location.
2. Does not operate properly.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-234 **IS AN OPERABLE ESD STATION LOCATED AT THE CENTER OR EACH END OF A BRIDGE CONNECTING TWO PLATFORMS?**

Authority: 30 CFR 250.855 **Enforcement Actions: S**

INSPECTION PROCEDURES:

1. Verify that there is an ESD station at the center or each end of a bridge connecting two platforms.
2. Verify operation of ESD station by testing in accordance with Appendix 10 on the National PINC List.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (**S**) INC when an ESD station:

1. Does not exist at the required location.
2. Does not operate properly.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected.

P-235 **IS AN OPERABLE ESD STATION LOCATED AT EACH EMERGENCY EVACUATION STATION?**

Authority: 30 CFR 250.855 **Enforcement Actions: S**

INSPECTION PROCEDURES:

1. Verify that there is an ESD station at each emergency evacuation station.
2. Verify operation of ESD station by testing in accordance with Appendix 10 of the National PINC List.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC when an ESD station:

1. Does not exist at the required location.
2. Does not operate properly.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-237 **IS AN OPERABLE ESD STATION LOCATED NEAR THE MAIN EXITS OF LIVING QUARTERS?**

Authority: 30 CFR 250.855 **Enforcement Actions: S**

Note: Main exit is defined as the exits from the quarters to the main deck.

INSPECTION PROCEDURES:

1. Verify that there is an ESD station near the main exits of all living quarters.
2. Verify operation of ESD station by testing in accordance with Appendix 10 of the National PINC List.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC when an ESD station:

1. Does not exist at the required location.
2. Does not operate properly.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-238 **IS A SCHEMATIC OF THE ESD SYSTEM MAINTAINED ON THE FACILITY OR AT THE LESSEE'S NEAREST OCS FIELD OFFICE?**

Authority: 30 CFR 250.855(b) **Enforcement Actions: W**

INSPECTION PROCEDURE:

Verify that a schematic of the ESD system which indicates the control function of all safety devices is maintained on the facility or at the lessee's field office nearest the facility.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if a schematic of the ESD system is not maintained on the facility or at the lessee's nearest field office.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each facility inspected

P-239 **IS THE ESD SYSTEM EQUIPPED WITH MANUALLY OPERATED, QUICK-OPENING, AND NON-RESTRICTED VALVES?**

Authority: 30 CFR 250.855(a) **Enforcement Actions: S**

DEFINITIONS:

1. ESD System - A system of manual stations which, when activated, initiates platform shutdown with the exception of fire-fighting system.
2. Manually Operated - A mechanical lever or an electrical button used to operate the ESD system. 3.
3. Quick Opening Valve - A ball valve or a solenoid valve as compared to a rising stem valve.

Note: Only ESD stations at the boat landing may utilize a loop of breakable synthetic tubing in lieu of a valve.

INSPECTION PROCEDURES:

1. Avoid platform shut-in when operating each ESD station. The ESD valve should operate freely. Operate ESD valve and observe for pressure drop at the master panel.
2. Inspect to verify that all ESD stations are equipped with manually operated, quick opening and non-restricted valves.

IF NONCOMPLIANCE EXISTS:

Issue a facility shut-in (S) INC if:

1. The ESD valve cannot be manually operated.
2. The ESD valves are not quick-opening.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-240 **DOES THE SSV AND SDV ON ALL OTHER PROCESS COMPONENTS CLOSE WITHIN 45 SECONDS AFTER AUTOMATIC DETECTION OF AN ABNORMAL CONDITION OR ACTIVATION OF THE ESD?**

Authority: 30 CFR 250.821(b) – SSV **Enforcement Actions: C/S**
30 CFR 250.855 – SDV

Note: Consideration should be given to avoid total platform shut-in, as well as those wells which have a history of problems returning to flow after extended periods of being shut-in.

INSPECTION PROCEDURES:

1. Initiate a test of the ESD system by operating a selected ESD station (see Appendix 10).
   A. Select wells or components to be shut-in and isolate all non-selected wells and components.
   B. Time closure from the time the ESD is actuated to full closure of wells and components.
   C. Check all selected wells and components to assure that actuation has been achieved.
   D. Operate ESD and observe how appropriate relays operate.
2. Initiate a shut-in by creating an abnormal condition (e.g., activating a sensor).
   A. Select wells and components to be shut-in and have the operator isolate all non-selected wells and components.
   B. Time closure from the time the ESD is actuated or after automatic detection of an abnormal condition to full closure of wells and components.
   C. Check all selected wells and components to ensure that actuation has been achieved.
   D. Observe how appropriate relays operate.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when a well or component fails to close within 45 seconds.
Issue a facility shut-in (S) INC when the ESD fails to initiate surface and subsurface shut-in.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-241 **DOES THE SURFACE-CONTROLLED SSSV CLOSE WITHIN 2 MINUTES AFTER THE ESD OR FIRE DETECTION SYSTEM SHUT-IN SIGNAL HAS CLOSED THE SSV?**

Authority: 30 CFR 250.821(b) **Enforcement Actions: C/S**

INSPECTION PROCEDURES:

In conjunction with the test of the SSV (PINC's P-240 & P-175), monitor the applied hydraulic control pressure to the selected SSSV to verify SSSV closure within 2 minutes after full closure of the SSV.

1. Select wells to be shut-in and have the operator isolate all non-selected wells.
2. Time closure from the time the SSV reaches full closure to bleed down of hydraulic control pressure for the SSSV.
3. Check all selected wells to assure that actuation has been achieved.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC for each selected SSSV that fails to activate within 2 minutes after activation of the SSV.
Issue a facility shut-in (S) INC when automatic detection of an abnormal condition or actuation of an ESD fails to initiate subsurface shut-in.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-242 **IS EACH ESD SYSTEM TESTED FOR OPERATION AT LEAST ONCE EACH MONTH, BUT AT NO TIME SHALL MORE THAN 6 WEEKS ELAPSE BETWEEN TESTS?**

Authority: 30 CFR 250.880(c)(3)(iii) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each ESD system has been tested each month, that no more than 6 weeks have elapsed between tests.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the ESD has been tested at the required interval, but the ESD has been tested in the last 6 weeks.
Issue a component shut-in (C) INC for the component(s) that would be shut-in by the ESD when a review of records does not verify that the ESD has been tested at the required interval and the ESD has not been tested in the last 6 weeks.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each system inspected

P-243 **IS EACH ESD SYSTEM TEST CONDUCTED BY ALTERNATING ESD STATIONS MONTHLY TO CLOSE AT LEAST ONE WELLHEAD SSV AND VERIFY SURFACE-CONTROLLED SSSV CLOSURE FOR THAT WELL AS INDICATED BY CONTROL CIRCUITRY ACTUATION?**

Authority: 30 CFR 250.880(c)(3)(iii) **Enforcement Actions: W/S**

Note: The boat landing ESD loop of synthetic tubing shall be considered a station when utilized in lieu of a valve or electric switch in accordance with API RP 14 C, Appendix C.1.1.2. (h).

INSPECTION PROCEDURES:

1. Review operator's records to verify that:
   A. The ESD test is conducted by alternating ESD stations monthly.
   B. The ESD test results in the closure of at least one wellhead SSV and associated SSSV.
2. Select one ESD station for testing and conduct a test of that station by activating the station to initiate shut-in of at least one well. Verify closure of SSV by observing valve stem. Verify closure of SSSV by observing control circuitry actuation.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the operator records do not verify that the ESD test:

1. Is conducted by alternating ESD stations monthly.
2. Actuated closure of at least one wellhead SSV.
3. Actuated closure of a surface-controlled SSV of at least one well is indicated by control circuitry actuation. Issue a facility shut-in (S) INC when the ESD test does not initiate SSV shut-in or indicated SSSV shut-in.

INSPECTION COUNT/INC COUNT:

Enter one item checked/ issue one INC for each system inspected

SUBSURFACE SAFETY DEVICES

P-260 **ARE ALL TUBING INSTALLATIONS OPEN TO A HYDROCARBON-BEARING ZONE WHICH IS CAPABLE OF NATURAL FLOW EQUIPPED WITH AN SSSV?**

Authority: 30 CFR 250.810 **Enforcement Actions: C**
30 CFR 250.825(a)

DEFINITION: Open to hydrocarbon-bearing zones - Any well with open perforations in a hydrocarbon-bearing zone regardless of tubing-packer configuration.

Note: An SSSV is permitted if it meets one of the following criteria and is approved by the District Manager:

1. Well was not previously equipped with SSSV but will be so equipped when the tubing is first removed and reinstalled.
2. The SSSV is installed in a well completed from a single-well or multi-well satellite caisson or sea floor completion.
3. The SSSV is installed in a well with a SSSV that has become inoperable and cannot be repaired without removal and reinstallation of the tubing.

INSPECTION PROCEDURES:

Review operator individual well records to verify installation of an SSSV in all wells open to a hydrocarbon-bearing zone which is capable of natural flow.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when records do not confirm that all wells open to a hydrocarbon-bearing zone which are capable of natural flow are equipped with an SSSV.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each tubing installation inspected

P-261 **ARE NEW COMPLETIONS (PERFORATED BUT NOT PLACED ON PRODUCTION) AND COMPLETIONS SHUT-IN FOR A PERIOD OF MORE THAN 6 MONTHS EQUIPPED WITH EITHER (1) A PUMP-THROUGH TYPE TUBING PLUG; (2) A SURFACE-CONTROLLED SSSV WITH THE SURFACE CONTROL RENDERED INOPERATIVE; OR (3) AN INJECTION VALVE CAPABLE OF PREVENTING BACKFLOW?**

Authority: 30 CFR 250.815 **Enforcement Actions: W**
30 CFR 250.829(a)

DEFINITIONS:

1. Shut-in completion - Completion open to hydrocarbon-bearing zones, shut-in at the surface and no attempt to produce the well within the past 6 months is documented.
2. Rendered inoperative - Hydraulic control line must be completely disconnected and plugged from the control valve on the wellhead flange and hydraulic control pressure bled off the SSSV.

INSPECTION PROCEDURES:

1. Review operator individual well records and production reports to verify that a pump-through type tubing plug, a SSSV used as a tubing plug, or an injection valve is installed in each well that is shut-in for 6 months or longer.
2. Inspect all wells equipped with a SSSV to ensure that:
   A. The SSSV's hydraulic control line is disconnected from the needle valve on the wellhead flange;
   B. Hydraulic control pressure has been bled off the SSSV.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when records do not confirm that all wells shut-in for 6 months or longer are equipped with a pump-through tubing plug, an SSSV that is rendered inoperable, or an injection valve.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each plugged well inspected

P-262 **IS A SURFACE-CONTROLLED SSSV OR AN INJECTION VALVE CAPABLE OF PREVENTING BACKFLOW INSTALLED IN EACH INJECTION WELL?**

Authority: 30 CFR 250.816 **Enforcement Actions: C**
30 CFR 250.830
30 CFR 250.874(a)

INSPECTION PROCEDURE:

Review the individual well record to determine if the injection well is equipped with an injection valve or a SSSV.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when the records confirm that an injection well is without an injection valve or SSSV.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each injection well inspected

P-263 **IS A SUBSURFACE SAFETY DEVICE INSTALLED AT A DEPTH OF 100 FEET OR MORE BELOW THE SEA FLOOR WITHIN 2 DAYS AFTER PRODUCTION IS ESTABLISHED?**

Authority: 30 CFR 250.814(a) **Enforcement Actions: W/C**
30 CFR 250.828(a)

DEFINITION: Production - Established when produced fluid or gas is sent to sales.

INSPECTION PROCEDURE:

Review operator individual well files to verify installation of a subsurface safety device or injection valve in all wells open to hydrocarbon bearing zones at a set depth of at least 100 feet below ocean floor within 2 days after production is established.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when records indicate that a well open to hydrocarbon-bearing zones was equipped with a subsurface safety device or injection valve set at least 100 feet below the ocean floor more than 2 days after production being established.

Issue a component shut-in (C) INC when records do not confirm that all wells open to hydrocarbon-bearing zones for more than 2 days after production was established are equipped with a subsurface safety device or injection valve set at least 100 feet below the ocean floor.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each subsurface safety valve inspected

P-264 **IF THE SSSV IS REMOVED AND THE ZONE IS OPEN TO FLOW, IS FLOWING NECESSARY FOR THE OPERATION BEING CONDUCTED?**

Authority: 30 CFR 250.814(c) **Enforcement Actions: W/C**

DEFINITIONS:

1. Open-to-Flow Well - A well open to a hydrocarbon-bearing zone.
2. Necessary for the operation being conducted - Natural flow or artificial lift necessary for operations (i.e., flowing pressure survey, cleaning-up high sand cut well, cutting paraffin, cleaning out tubing with coil tubing, pipe, etc.).

INSPECTION PROCEDURES:

1. Review individual well records to determine in the operator continued to produce the well after the SSSV had been removed.
2. Determine if producing the well was necessary for the operation being conducted.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when records do not confirm that producing the well with the SSSV removed was necessary for the operation being conducted and the SSSV has been reinstalled.

Issue a component shut-in (C) INC when records do not confirm that producing the well with the SSSV removed was necessary for the operation being conducted and the SSSV has not been reinstalled.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each flowing well not equipped with an SSSV inspected

P-265 **IS A PERSON IN THE IMMEDIATE VICINITY OF THE WELL IF THE MASTER VALVE IS OPEN AND THE SUBSURFACE SAFETY DEVICE IS NOT INSTALLED?**

Authority: 30 CFR 250.817 **Enforcement Actions: C**

DEFINITION: Immediate vicinity - In the same well bay

INSPECTION PROCEDURES:

1. Review operator records to identify all wells that are not equipped with an SSSV to document:
   A. All wells not so equipped and the reason why the SSSV is removed.
   B. Producing status.
2. Inspect all wells not equipped with an SSSV.
   A. Master Valve open – Verify a person is in the immediate vicinity of the well.
   B. Master Valve closed – Verify well is being monitored and a person doesn't need to be in the immediate vicinity of the well.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when the SSSV is removed and the well is not attended by a person in the immediate vicinity of the wellhead.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per well bay inspected

P-267 **ARE ALL TUBING INSTALLATIONS IN WHICH A WIRELINE OR PUMPDOWN-RETRIEVABLE SUBSURFACE SAFETY DEVICE IS INSTALLED EQUIPPED WITH A LANDING NIPPLE WITH FLOW COUPLINGS OR OTHER PROTECTIVE EQUIPMENT ABOVE AND BELOW TO PROVIDE FOR THE SETTING OF THE SSSV?**

Authority: 30 CFR 250.818(a) **Enforcement Actions: C**
30 CFR 250.832(a)

INSPECTION PROCEDURES:

1. Review operator individual well records to verify that each tubing installation is equipped with a landing nipple to provide for the setting of the SSSV and flow couplings above and below.
2. Review operator individual well records to verify that each SSSV is installed in a landing nipple or that those SSSV's not installed in a landing nipple have a departure to be tubing wall set.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. The tubing installation is not equipped with a landing nipple and flow couplings.
2. The SSSV is not installed in a landing nipple and a departure has not been approved.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each tubing installation inspected

P-268 **DOES EACH SURFACE-CONTROLLED AND SUBSURFACE-CONTROLLED SSSV AND ASSOCIATED SAFETY VALVE LOCK AND LANDING NIPPLE CONFORM TO THE CERTIFICATION REQUIREMENTS IN 30 CFR 250.801 THROUGH 802?**

Authority: 30 CFR 250.802 **Enforcement Actions: C**

DEFINITION: Re-manufacture - Any activity involving disassembly, re-assembly, and testing of SSSV equipment or any item thereof, with or without the replacement of qualified parts where machining, welding, heat treating or other manufacturing operation is employed.

Notes: If a non-certified SPPE is already in service, it may remain in service on that well unless it requires offsite repair, re-manufacturing, or any work. Then the operator must replace it with a SPPE certified valve.

INSPECTION PROCEDURES:

1. Inspect individual well file to determine if the SSSV and associated safety valve locks and landing nipples are certified pursuant to ANSI/API Spec. QI, or is approved under BSEE's approved quality program. If approved under BSEE's approved quality program, operator must have received BSEE approval.
2. Inspect individual well file to determine if a noncertified SSSV and associated safety valve locks and landing nipples have not been sent offsite for repair, re-manufacturing, or any hot work such as welding. If it has been, the noncertified valve must be replaced with a certified valve.

NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC for each SSSV and associated safety valve locks and landing nipples if:

1. It is not a certified valve pursuant to ANSI/API Spec. QI or is not approved under BSEE's approved quality program.
2. A noncertified SSSV was sent offsite for repair, re-manufacturing, or any hot work such as welding, but was not replace with a certified valve.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each completion inspected.

P-269 **WHEN THE SUBSURFACE SAFETY DEVICE HAS BEEN REMOVED FOR MORE THAN 15 DAYS HAS BSEE APPROVAL BEEN GIVEN?**

Authority: 30 CFR 250.817(a) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator individual well record to determine if the SSSV has been removed for more than 15 days from a completion in a hydrocarbon-bearing zone.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records confirm that the SSSV has been removed from the completion for more than 15 days without approval and has been reinstalled.

Issue a component shut-in (C) INC if records confirm that the SSSV has been removed from the completion for more than 15 days without approval and is still removed.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each subsurface safety device inspected

P-270 **WHEN THE SUBSURFACE SAFETY DEVICE HAS BEEN REMOVED, IS THE WELL IDENTIFIED BY A SIGN ON THE WELLHEAD STATING THAT THE SUBSURFACE SAFETY DEVICE HAS BEEN REMOVED?**

Authority: 30 CFR 250.817(b) **Enforcement Actions: W/C**

INSPECTION PROCEDURES:

1. Review operator individual well records to identify all wells that are not equipped with an SSSV.
2. Inspect all wells that are not equipped with an SSSV to assure that each well not so equipped is clearly identified as such by a sign at the wellhead.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when the SSSV is removed, the Master valve is closed and the well is not clearly identified as such by a sign at the wellhead.

Issue a component shut-in (C) INC when the SSSV is removed, and the Master Valve is open and the well is not clearly identified as such by a sign at the wellhead.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each safety device inspected.

P-271 **WHEN THE SUBSURFACE SAFETY DEVICE HAS BEEN REMOVED FOR ROUTINE OPERATIONS ON A SATELLITE STRUCTURE, IS THE WELL ATTENDED?**

Authority: 30 CFR 250.817(c) **Enforcement Actions: W/C**

DEFINITION:

Attended - Either on the satellite structure if the master valve is open or on a support vessel moored to the satellite structure if the master valve is closed, unless otherwise approved by the appropriate District Manager. A support vessel must be moored to the satellite structure until the SSSV in reinstalled or a pump-through plug must be installed in the tubing at least 100 feet below the mudline. Furthermore, a trained person must be on the satellite structure if the master valve is open, unless otherwise approved by the appropriate District Manager.

INSPECTION PROCEDURES:

1. Review operator records to identify all satellite wells that are not equipped with an SSSV.
2. Inspect all satellite wells not equipped with an SSSV to verify that the well is attended.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when the SSSV is removed, the Master valve is closed and the well is not attended.

Issue a component shut-in (C) INC when the SSSV is removed, the Master Valve is open, and the well is not attended and approval was not granted to do so by the District Manager.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each well inspected

SUBSURFACE SAFETY DEVICE TESTING

P-280 **IS EACH SURFACE-CONTROLLED SSSV INSTALLED IN A WELL TESTED WHEN INSTALLED OR REINSTALLED AND AT INTERVALS NOT EXCEEDING 6 MONTHS AND REMOVED, REPAIRED AND REINSTALLED, OR REPLACED, IF IT DOES NOT OPERATE PROPERLY?**

Authority: 30 CFR 250.880(c)(1)(i) – Dry Tree **Enforcement Actions: W/C**

30 CFR 250.880(c)(4)(i) – Sub-Surface Tree

Notes:

1. The established leakage rates are 15 cubic feet of gas and 400 cubic centimeters per minute of liquid for both wet and dry trees.
2. Should the holding integrity of the valve be in question, the operator shall be advised that the valve must be tested either in accordance with API RP 14B, Annex E, or as approved by the District Manager.

INSPECTION PROCEDURES:

1. Review operator records to verify that each SSSV is tested when installed or reinstalled and at intervals not exceeding 6 months and removed, repaired and reinstalled, or replaced, if it does not operate properly.
2. A sample of the active wells on a multi-well platform may be selected for testing in accordance with API RP 14 B.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the SSSV has been tested at the required interval, but the SSSV has been tested in the last 6 months.

Issue a component shut-in (C) INC for the well when:

1. A review of records does not verify that the SSSV has been tested at the required interval and the SSSV has not been tested in the last 6 months.
2. A sample SSSV has a leakage rate higher than the maximum allowable as prescribed in API RP 14 B, Annex E.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each SSSV installation inspected

P-281 **IS EACH SUBSURFACE-CONTROLLED SSSV INSTALLED IN A WELL REMOVED, INSPECTED, AND REPAIRED OR ADJUSTED, AND REINSTALLED OR REPLACED AS NECESSARY AT INTERVALS NOT EXCEEDING 6 MONTHS FOR THOSE VALVES NOT INSTALLED IN A LANDING NIPPLE AND 12 MONTHS FOR THOSE VALVES INSTALLED IN A LANDING NIPPLE?**

Authority: 30 CFR 250.880(c)(1)(ii) **Enforcement Actions: W/C**

DEFINITION: Landing nipple - An integral part of the tubing string designed to accept the latching mechanism of the subsurface-controlled SSSV.

INSPECTION PROCEDURE:

Verify that each subsurface-controlled SSSV not in a landing nipple has been removed, inspected, repaired, and replaced not exceeding 6 months and not exceeding 12 months for each subsurface controlled SSSV installed in a landing nipple.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when the SSSV has been inspected but exceeded the required interval.

Issue a component shut-in (C) INC if each SSSV:

1. Not installed in a landing nipple has not been removed, inspected, repaired, and replaced exceeding 6 months.
2. Installed in a landing nipple has not been removed, inspected, repaired, and replaced exceeding 12 months.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each SSSV inspected

P-283 **IS EACH TUBING PLUG INSTALLED IN A WELL TESTED FOR LEAKAGE AT INTERVALS NOT EXCEEDING 6 MONTHS AND REMOVED, REPAIRED AND REINSTALLED, OR REPLACED, IF IT LEAKS?**

Authority: 30 CFR 250.880(c)(1)(iii) **Enforcement Actions: W**

INSPECTION PROCEDURES:

1. Review operator records to verify that each tubing plug is tested for leakage at intervals not exceeding 6 months and removed, repaired and reinstalled, or replaced, if it leaks.
2. A sample of the active wells on a multi-well platform may be selected for testing in accordance with Appendix 9.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when:

1. A review of records does not verify that the tubing plug has been tested at the required interval.
2. A sample tubing plug has a leakage rate higher than the maximum allowable (15 cubic feet of gas and 400 cubic centimeters per minute of liquid).

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each tubing plug installation inspected

P-284 **IS EACH INJECTION VALVE INSTALLED IN A WELL INSPECTED FOR LEAKAGE AT INTERVALS NOT EXCEEDING 6 MONTHS AND REMOVED, REPAIRED AND REINSTALLED, OR REPLACED, IF IT LEAKS?**

Authority: 30 CFR 250.880(c)(1)(iv) **Enforcement Actions: W/C**

INSPECTION PROCEDURES:

1. Review operator records to verify that each injection valve is tested for leakage at intervals not exceeding 6 months and removed, repaired and reinstalled, or replaced, if it leaks.
2. A sample of the active wells on a multi-well platform may be selected for testing in accordance with Appendix 9.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the injection valve has been tested at the required interval, but the injection valve has been tested in the last 6 months.

Issue a Component (C) INC when:

1. A review of records does not verify that the injection valve has been tested at the required interval.
2. A sample injection valve has a leakage rate higher than the maximum allowable (15 cubic feet of gas and 400 cubic centimeters per minute of liquid).

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each injection valve installation inspected

SURFACE SAFETY DEVICE RECORDS

P-300 **IS EACH PUMP FOR A FIREWATER SYSTEM INSPECTED AND TESTED FOR OPERATION WEEKLY AND REPAIRED OR REPLACED IF FOUND DEFECTIVE?**

Authority: 30 CFR 250.880(c)(3)(i) **Enforcement Actions: W/S**

INSPECTION PROCEDURE:

Review operator records to verify that each pump for a firewater system has been tested weekly and that it was repaired or replaced if found defective. Deviation from these requirements must be approved by the appropriate District Manager.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if a review of records does not verify that the pump has been tested at the required interval, but the pump has been tested in the last week.

Issue a facility shut-in (S) INC if a review of records does not verify that the pump has been repaired or replaced if found defective and/or tested at the required interval and the pump has not been tested in the last week.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each pump inspected

P-301 **IS EACH PSH TESTED FOR OPERATION AT LEAST ONCE EACH MONTH, WITH NO MORE THAN 6 WEEKS ELAPSING BETWEEN TESTS?**

Authority: 30 CFR 250.880(c)(3)(x) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each PSH has been tested each month, and that no more than 6 weeks have elapsed between tests.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the PSH has been tested at the required interval, but the PSH has been tested in the last 6 weeks.

Issue a component shut-in (C) INC for the component protected by the PSH when a review of records does not verify that the PSH has been tested at the required interval and the PSH has not been tested in the last 6 weeks.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected.

P-302 **IS EACH PSL TESTED FOR OPERATION AT LEAST ONCE EACH MONTH, WITH NO MORE THAN 6 WEEKS ELAPSING BETWEEN TESTS?**

Authority: 30 CFR 250.880(c)(3)(x) **Enforcement Action: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each PSL has been tested each month and that no more than 6 weeks have elapsed between tests.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the PSL has been tested at the required interval, but the PSL has been tested in the last 6 weeks.

Issue a component shut-in (C) INC for the component protected by the PSL when a review of records does not verify that the PSL has been tested at the required interval and the PSL has not been tested in the last 6 weeks.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected.

P-303 **IS EACH LSH TESTED FOR OPERATION AT LEAST ONCE EACH MONTH, WITH NO MORE THAN 6 WEEKS ELAPSING BETWEEN TESTS?**

Authority: 30 CFR 250.880(c)(3)(x) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each LSH has been tested each month and that no more than 6 weeks have elapsed between tests.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the LSH has been tested at the required interval, but the LSH has been tested in the last 6 weeks.

Issue a component shut-in (C) INC for the component protected by the LSH when a review of records does not verify that the LSH has been tested at the required interval and the LSH has not been tested in the last 6 weeks.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected.

P-304 **IS EACH LSL TESTED FOR OPERATION AT LEAST ONCE EACH MONTH, WITH NO MORE THAN 6 WEEKS ELAPSING BETWEEN TESTS?**

Authority: 30 CFR 250.880(c)(3)(x) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each LSL has been tested each month and that no more than 6 weeks have elapsed between tests.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the LSL has been tested at the required interval, but the LSL has been tested in the last 6 weeks.

Issue a component shut-in (C) INC for the component protected by the LSL when a review of records does not verify that the LSL has been tested at the required interval and the LSL has not been tested in the last 6 weeks.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-305 **IS EACH AUTOMATIC INLET SDV AND EACH LIQUID DISCHARGE SDV TESTED FOR OPERATION AT LEAST ONCE EACH MONTH, WITH NO MORE THAN 6 WEEKS ELAPSING BETWEEN TESTS?**

Authority: 30 CFR 250.880(c)(2)(ii) **Enforcement Actions: W/C**
30 CFR 250.880(c)(2)(iii)

INSPECTION PROCEDURE:

Review operator records to verify that each automatic inlet SDV and each liquid discharge SDV has been tested each month and that no more than 6 weeks have elapsed between tests.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the SDV has been tested at the required interval, but the SDV has been tested in the last 6 weeks.

Issue a component shut-in (C) INC for the component protected by the SDV when a review of records does not verify that the SDV has been tested at the required interval and the SDV has not been tested in the last 6 weeks.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-307 **IS EACH SSV TESTED FOR OPERATION AT LEAST ONCE EACH MONTH, WITH NO MORE THAN 6 WEEKS ELAPSING BETWEEN TESTS, AND REPAIRED OR REPLACED IF FOUND DEFECTIVE?**

Authority: 30 CFR 250.880(c)(2)(iv) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each SSV has been tested each month, and that no more than 6 weeks have elapsed between tests, and that it was repaired or replaced if found defective.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the SSV has been tested at the required interval, but the SSV has been tested in the last 6 weeks.

Issue a component shut-in (C) INC when a review of records does not verify that the SSV has been repaired or replaced if found defective and/or tested at the required interval and the SSV has not been tested in the last 6 weeks.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-308 **IS EACH FLOWLINE FSV TESTED FOR OPERATION AT LEAST ONCE EACH MONTH, WITH NO MORE THAN 6 WEEKS ELAPSING BETWEEN TESTS, AND REPAIRED OR REPLACED IF FOUND DEFECTIVE?**

Authority: 30 CFR 250.880(c)(2)(v) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each flowline FSV has been tested each month, and that no more than 6 weeks have elapsed between tests, and that it was repaired or replaced if found defective.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the FSV has been tested at the required interval, but the FSV has been tested in the last 6 weeks.

Issue a component shut-in (C) INC for the component protected by the FSV when a review of records does not verify that the FSV has been repaired or replaced if found defective and/or tested at the required interval and the FSV has not been tested in the last 6 weeks.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected.

P-309 **IS EACH TSH ON COMPRESSOR INSTALLATIONS TESTED FOR OPERATION AT LEAST ONCE EVERY 6 MONTHS AND REPAIRED OR REPLACED IF FOUND DEFECTIVE?**

Authority: 30 CFR 250.880(c)(3)(v) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each TSH on compressor installations has been tested every 6 months and that it was repaired or replaced if found defective.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the TSH has been tested at the required interval, but the TSH has been tested in the last 6 months.

Issue a component shut-in (C) INC for the compressor installation when a review of records does not verify that the TSH has been repaired or replaced if found defective and/or tested at the required interval and the TSH has not been tested in the last 6 months.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-310 **IS EACH TSH ON NON-COMPRESSOR INSTALLATIONS TESTED FOR OPERATION AT LEAST ONCE EVERY 12 MONTHS?**

Authority: 30 CFR 250. 880(c)(3)(iv) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each TSH on non-compressor installations has been tested every 12 months.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the TSH has been tested at the required interval, but the TSH has been tested in the last 12 months.

Issue a component shut-in (C) INC for the component protected by the TSH when a review of records does not verify that the TSH has been tested at the required interval and the TSH has not been tested in the last 12 months.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-311 **IS EACH BSL TESTED FOR OPERATION AT LEAST ONCE EVERY 12 MONTHS?**

Authority: 30 CFR 250.880(c)(3)(vi) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each BSL has been tested every 12 months.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the BSL has been tested at the required interval, but the BSL has been tested in the last 12 months.

Issue a component shut-in (C) INC for the component protected by the BSL when a review of records does not verify that the BSL has been tested at the required interval and the BSL has not been tested in the last 12 months.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-312 **IS EACH FSL TESTED FOR OPERATION AT LEAST ONCE EVERY 12 MONTHS?**

Authority: 30 CFR 250.880(c)(3)(vii) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each FSL has been tested every 12 months.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the FSL has been tested at the required interval, but the FSL has been tested in the last 12 months.

Issue a component shut-in (C) INC for the component protected by the FSL when a review of records does not verify that the FSL has been tested at the required interval and the FSL has not been tested in the last 12 months.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-313 **IS EACH PSV TESTED FOR OPERATION AT LEAST ONCE EVERY 12 MONTHS?**

Authority: 30 CFR 250.880(c)(2)(i) **Enforcement Actions: W/C**

Note: Weighted disc vent valves used as PSVs on atmospheric tanks may be disassembled.

INSPECTION PROCEDURE:

Review operator records to verify that each PSV has been tested every 12 months. Testing of pilot controlled PSV's must include lifting the main valve piston.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the PSV has been tested at the required interval, but the PSV has been tested in the last 12 months.

Issue a component shut-in (C) INC for the component protected by the PSV when a review of records does not verify that the PSV has been tested at the required interval and the PSV has not been tested in the last 12 months.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-314 **IS EACH ELECTRONIC PSH TESTED FOR OPERATION EVERY 3 MONTHS, WITH NO MORE THAN 120 DAYS ELAPSING BETWEEN TESTS?**

Authority: 30 CFR 250.880(c)(3)(ix) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each electronic PSH has been tested every 3 months, but no more than 120 days have elapsed between tests.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the PSH has been tested at the required interval, but the PSH has been tested in the last 120 days.

Issue a component shut-in (C) INC for the component protected by the PSH when a review of records does not verify that the PSH has been tested at the required interval and the PSH has not been tested in the last 120 days.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-315 **IS EACH ELECTRONIC PSL TESTED FOR OPERATION EVERY 3 MONTHS, WITH NO MORE THAN 120 DAYS ELAPSING BETWEEN TESTS?**

Authority: 30 CFR 250.880(c)(3)(ix) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each electronic PSL has been tested every 3 months, but no more than 120 days have elapsed between tests.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the electronic PSL has been tested at the required interval, but the PSL has been tested in the last 120 days.

Issue a component shut-in (C) INC for the component protected by the PSL when a review of records does not verify that the PSL has been tested at the required interval and the PSL has not been tested in the last 120 days.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-316 **IS EACH ELECTRONIC LSH TESTED FOR OPERATION EVERY 3 MONTHS, WITH NO MORE THAN 120 DAYS ELAPSING BETWEEN TESTS?**

Authority: 30 CFR 250.880(c)(3)(ix) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each electronic LSH has been tested every 3 months, but no more than 120 days have elapsed between tests.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the electronic LSH has been tested at the required interval, but the LSH has been tested in the last 120 days.

Issue a component shut-in (C) INC for the component protected by the LSH when a review of records does not verify that the LSH has been tested at the required interval and the LSH has not been tested in the last 120 days.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-317 **IS EACH ELECTRONIC LSL TESTED FOR OPERATION EVERY 3 MONTHS, WITH NO MORE THAN 120 DAYS ELAPSING BETWEEN TESTS?**

Authority: 30 CFR 250.880(c)(3)(ix) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each electronic LSL has been tested every 3 months, but no more than 120 days have elapsed between tests.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the electronic LSL has been tested at the required interval, but the LSL has been tested in the last 120 days.

Issue a component shut-in (C) INC for the component protected by the LSL when a review of records does not verify that the LSH has been tested at the required interval and the LSL has not been tested in the last 120 days.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-318 **IS EACH PRIMARY USV TESTED FOR OPERATION AT LEAST ONCE EVERY 3 CALENDAR MONTHS, NOT TO EXCEED 120 DAYS AND IF THE DEVICE DOES NOT FUNCTION PROPERLY, OR IF A LIQUID LEAKAGE RATE > 400 CUBIC CENTIMETERS PER MINUTE OR A GAS LEAKAGE RATE > 15 CUBIC FEET PER MINUTE IS OBSERVED, THE VALVE MUST BE REMOVED, REPAIRED, AND REINSTALLED, OR REPLACED?**

Authority: 30 CFR 250.880(c)(4)(ii) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each primary USV has been tested every 3 calendar months, not to exceed 120 days and that it was repaired or replaced if found defective.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the primary USV has been tested at the required interval, but the USV has been tested in the last 120 days.

Issue a component shut-in (C) INC when a review of records does not verify that the primary USV has been repaired or replaced if found defective and/or tested at the required interval and the primary USV has not been tested in the last 120 days.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per USV inspected

P-319 **IS EACH BSDV TESTED FOR OPERATION AT LEAST ONCE EACH MONTH, NOT TO EXCEED 6 WEEKS AND IF THE DEVICE DOES NOT FUNCTION PROPERLY, OR IF A LIQUID LEAKAGE RATE OR A GAS LEAKAGE RATE IS OBSERVED, THE VALVE MUST BE REMOVED, REPAIRED, AND REINSTALLED, OR REPLACED?**

Authority: 30 CFR 250.880(c)(4)(iii) **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Review operator records to verify that each BSDV has been tested each month, not to exceed 6 weeks and that it was repaired or replaced if found defective.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the BSDV has been tested at the required interval, but the BSDV has been tested in the last 6 weeks.

Issue a component shut-in (C) INC when a review of records does not verify that the BSDV has been repaired or replaced if found defective and/or tested at the required interval and the BSDV has not been tested in the last 6 weeks.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per BSDV inspected

RECORDS

P-320 **DOES THE LESSEE MAINTAIN RECORDS FOR A PERIOD OF 2 YEARS AT THE LESSEE'S NEAREST OCS FIELD OFFICE THAT INCLUDE DATES AND DETAILS OF INSTALLATION, REMOVAL, INSPECTION, TESTING, REPAIRING, ADJUSTMENTS AND REINSTALLATION FOR EACH SUBSURFACE AND SURFACE SAFETY DEVICE INSTALLED?**

Authority: 30 CFR 250.890(b) **Enforcement Actions: W/C**

Note: Nearest field office may be across area boundary lines or in some cases onshore. These records must be available for review by a representative of BSEE.

INSPECTION PROCEDURES:

1. Review operator records to verify that the records for each safety device are available and maintained in the field office nearest the facility for a minimum period of 2 years and that the records contain all of the required information.
2. Verify that the records show the present status and history of each device including dates and details of installation, removal, inspection, testing, repairing, adjustments, and reinstallation.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when operator records:

1. Are not available and maintained in the nearest field office for 2 years.
2. Do not contain all of the required information.

Issue a component shut-in (C) when operator records indicate the defective subsurface and/or surface safety device has not been repaired and the defective safety device is still installed or if the defective safety device has been removed and another safety device has not been installed in its place.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

P-321 **HAS THE OPERATOR SUBMITED TO THE APPROPRIATED DISTRICT MANAGER A CONTACT LIST FOR ALL OCS OPERATED PLATFORMS AT LEAST ANNUALLY OR WHEN CONTACT INFORMATION IS REVISED?**

Authority: 30 CFR 250.890(c) **Enforcement Actions: W**

Note: Annually means not to exceed 12 months.

INSPECTION PROCEDURES:

Review operator records to verify that BSEE was notified at least annually or when contact information was revised.
Note: The contact list must include:

1. Designated operator name
2. Designated person in charge (PIC)
3. Facility phone numbers, if applicable
4. Facility fax number, if applicable
5. Facility radio frequency, if applicable
6. Facility helideck rating and size, if applicable
7. Facility records location if not contained at the facility

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that BSEE was notified at least annually or when contact information was revised.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC per facility inspected

SURFACE (NON-PIPELINE) PUMPS

P-340 **IS EACH NON-PIPELINE PUMP EQUIPPED WITH A PSH?**

Authority: 30 CFR 250.865(a) **Enforcement Actions: C**
30 CFR 250.865(b)

DEFINITIONS:

1. Pipeline pump - Primary pump which transfers produced liquid hydrocarbon from the process system to sales or to pipelines commingled for sales.
2. Non-pipeline pump - Pump which transfers produced liquid hydrocarbons and chemicals within the production process system or from containment systems to the process system.

INSPECTION PROCEDURES:

1. Verify that each pump is protected by PSH sensor:
   A. Located on the pump discharge piping upstream of the FSV or any block valve.
   B. Installed to sense pressure throughout the pump discharge piping.
   C. Installed on all pump discharge piping to shut off inflow and shut down the pump.
2. Verify that the PSH set and trip pressure test tolerance is in accordance with API RP 14 C, Appendix D.3.2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. Pump is not equipped with a PSH sensor.
2. PSH sensor is not located properly.
3. PSH sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each non pipeline pump inspected

P-341 **IS EACH NON-PIPELINE PUMP EQUIPPED WITH A PSL?**

Authority: 30 CFR 250.865(a) **Enforcement Actions: C**
30 CFR 250.865(b)
30 CFR 250.865(c)

Note: Time delay may not exceed 45 seconds without prior approval.

INSPECTION PROCEDURES:

1. Verify that each pump is protected by PSL sensor:
   A. Located on the pump discharge piping upstream of the FSV or any block valve.
   B. Installed to sense pressure throughout the pump discharge piping.
2. Verify that the PSL set and trip pressure test tolerance is in accordance with API RP 14C, Appendix D.3.2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. Pump is not equipped with a PSL sensor.
2. PSL sensor is not located properly.
3. PSL sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each non pipeline pump inspected

P-342 **IS EACH NON-PIPELINE PUMP EQUIPPED WITH A PSV?**

Authority: 30 CFR 250.865(a) **Enforcement Actions: C**

DEFINITIONS:

1. Pipeline pump - Primary pump which transfers produced liquid hydrocarbon from the process system to sales or to pipelines commingled for sales.
2. Non-pipeline pump - Pump which transfers produced liquid hydrocarbons and chemicals within the production process system or from containment systems to the process system.

Note: API Test tolerance does apply (PSV set pressure tolerances are plus or minus 2 psi for pressure up to and including 70 psi, and plus or minus 3 percent for pressure above 70 psi).

INSPECTION PROCEDURES:

Verify that each pump is protected by a PSV:

1. Located on the pump discharge piping upstream of any block valve.
2. Located to sense pressure throughout the pump discharge piping.
3. Located so that the PSV cannot be isolated except while testing.
4. Can be tested in accordance with Appendix 4.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. Pump is not equipped with a PSV.
2. PSV is not located as required.
3. PSV is not operable.
4. PSV is isolated.
5. PSV does not test within the specified tolerance.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each non pipeline pump inspected

P-343 **IS EACH NON-PIPELINE PUMP EQUIPPED WITH A FSV?**

Authority: 30 CFR 250.865(a) **Enforcement Actions: C**

INSPECTION PROCEDURE:

Verify that each pump is protected by FSV located in the pump discharge piping so that the entire line is protected from backflow.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Pump is not equipped with a FSV.
2. The FSV is not located properly.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each non pipeline pump inspected

P-344 **IS EACH GLYCOL POWERED GLYCOL PUMP EQUIPPED WITH A SDV?**

Authority: 30 CFR 250.865(a) **Enforcement Actions: C**

INSPECTION PROCEDURE:

Verify that each glycol powered glycol pump is protected by SDV located in the pump suction line as near the glycol contactor as possible.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Pump suction line is not equipped with an SDV.
2. The SDV is not located properly.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each glycol powered pump inspected

SUBSEA (NON-PIPELINE) PUMPS

P-350 **IS EACH SUBSEA PUMP EQUIPPED WITH PSH(s)?**

Authority: 30 CFR 250.875(b) **Enforcement Actions: W/C**
30 CFR 250.875(c)(1)
30 CFR 250.875(e)(2)

Notes:

1. Install a PSH sensor upstream of the BSDV, if the maximum possible discharge pressure of the subsea pump operating in a dead head condition (that is the maximum shut-in tubing pressure at the pump inlet and a closed BSDV) is less than the MAOP of the associated pipeline.
2. If the maximum possible discharge pressure of the subsea pump operating in a dead head situation could be greater than the MAOP of the pipeline at minimum, two independent functioning PSH sensors upstream of the subsea pump and two independent functioning PSH sensors downstream of the pump

INSPECTION PROCEDURES:

1. Verify that each subsea pump is protected by PSH(s) sensor(s).
2. Verify that the PSH(s) test tolerance is in accordance with API RP 14 C, Appendix D.3.2.
3. Review records to verify the PSH(s) has been tested each quarter but in no case more than 120 days.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC When a review of records does not verify that the PSH(s) has been tested at the required interval, but the PSH(s) has been tested in the last 120 days.

Issue a component shut-in (C) INC if:

1. Subsea pump not equipped with a PSH(s).
2. The PSH(s) sensor(s) is not located properly.
3. The PSH(s) sensor(s) does not activate as required.
4. The review of records does not verify that the PSH(s) has been tested at the required interval and the PSH(s) has not been tested in the last 120 days.

INSPECTION COUNT/INC

Enter one item checked/issue one INC for each subsea pump inspected

P-351 **IS EACH SUBSEA PUMP EQUIPPED WITH PSL(s)?**

Authority: 30 CFR 250.875(b) **Enforcement Actions: W/C**
30 CFR 250.875(c)(1)
30 CFR 250.875(e)(2)

Notes:

1. Install a PSL sensor upstream of the BSDV, if the maximum possible discharge pressure of the subsea pump operating in a dead head condition (that is the maximum shut-in tubing pressure at the pump inlet and a closed BSDV) is less than the MAOP of the associated pipeline.
2. If the maximum possible discharge pressure of the subsea pump operating in a dead head situation could be greater than the MAOP of the pipeline install, at minimum, two independent functioning PSL sensors upstream of the subsea pump and two independent functioning PSL sensors downstream of the pump

INSPECTION PROCEDURES:

1. Verify that each subsea pump is protected by PSL(s) sensor(s).
2. Verify that the PSL(s) test tolerance is in accordance with API RP 14 C, Appendix D.3.2.
3. Review records to verify the PSL(s) has been tested each quarter but in no case more than 120 days.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that the PSL(s) has been tested at the required interval, but the PSL(s) has been tested in the last 120 days.

Issue a component shut-in (C) INC if:

1. Subsea pump is not equipped with a PSL(s).
2. The PSL(s) sensor(s) is not located properly.
3. The PSL(s) sensor(s) does not activate as required.
4. The review of records does not verify that the PSL(s) has been tested at the required interval and the PSL(s) has not been tested in the last 120 days.

INSPECTION COUNT/INC

Enter one item checked/issue one INC for each subsea pump inspected

P-352 **IS EACH SUBSEA PUMP EQUIPPED WITH AN ISOLATION VALVE AT THE INLET OF THE PUMP?**

Authority: 30 CFR 250.875(a) **Enforcement Actions: C**

INSPECTION PROCEDURE

Verify that each subsea pump is protected by an isolation valve at the inlet of the pump.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if: Subsea pump suction is not equipped with an isolation valve at the inlet of the pump.

INSPECTION COUNT/INC

Enter one item checked/issue one INC for each subsea pump inspected

GAS LIFT AND INJECTION LINES

P-361 **IS EACH WELLHEAD INJECTION LINE AND GAS LIFT LINE EQUIPPED WITH A PSH?**

Authority: 30 CFR 250.841(a) – Dry Tree **Enforcement Actions: C**
30 CFR 250.873(b) – Subsea Tree
30 CFR 250.874(c) – Subsea Tree

INSPECTION PROCEDURES:

1. Verify that each wellhead injection line and gas lift line is protected by PSH sensor:
   A. Located upstream of the FSV.
   B. Located on top of horizontal run or in a vertical run.
   C. Installed to sense pressure throughout the line.
2. Verify that the PSH set and trip pressure test tolerance is in accordance with API RP 14C, Appendix D.3.2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. Line is not equipped with a PSH sensor.
2. PSH sensor is not located properly.
3. PSH sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each line inspected

P-362 **IS EACH WELLHEAD INJECTION LINE AND GAS LIFT LINE EQUIPPED WITH A PSL?**

Authority: 30 CFR 250.841(a) – Dry Tree **Enforcement Actions: C**
30 CFR 250.873(b) – Subsea Tree
30 CFR 250.874(c) – Subsea Tree

INSPECTION PROCEDURES:

1. Verify that each wellhead injection line and gas lift line is protected by PSL sensor:
   A. Located upstream of the FSV.
   B. Located on top of horizontal run or in a vertical run.
   C. Installed to sense pressure throughout the line.
2. Verify that the PSL set and trip pressure test tolerance is in accordance with API RP 14 C, Appendix D.3.2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. Line is not equipped with a PSL sensor.
2. PSL sensor is not located properly.
3. PSL sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each line inspected

P-364 **IS EACH WELLHEAD INJECTION LINE AND GAS LIFT LINE EQUIPPED WITH A FSV?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**
30 CFR 250.1004(b)(7)

INSPECTION PROCEDURE:

Verify that each wellhead injection line and gas lift line is protected by FSV located so that the entire line is protected from backflow.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Line is not equipped with a FSV.
2. The FSV is not located properly.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each line inspected

P-365 **IS EACH DEPARTING SUBSEA GAS LIFT SUPPLY (GLS) LINE AND DEPARTING SUBSEA WATER INJECTION (WI) LINE EQUIPPED WITH AN FSV?**

Authority: 30 CFR 250.873(b)(1) **Enforcement Actions: C**
30 CFR 250.873(b)(2)
30 CFR 250.873(b)(3)
30 CFR 250.874(b)

INSPECTION PROCEDURE:
Verify that each departing SUBSEA WI line and GLS line is equipped with an FSV.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC if departing Subsea WI line or GLS line is not equipped with an FSV.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each departing subsea line inspected

P-366 **IS EACH DEPARTING SUBSEA GAS LIFT SUPPLY LINE EQUIPPED WITH A GAS LIFT SHUT DOWN VALVE (GLSDV)?**

Authority: 30 CFR 250.873(b) **Enforcement Actions: C**
30 CFR 250.873(d)

INSPECTION PROCEDURES:
1. Verify that each departing subsea gas lift supply line is equipped with a GLSDV.
2. Actuated by the PSH and PSL.
3. Verify that each GLSDV is operable by testing in accordance with the National PINC List Appendices, Appendix 8.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC if:
1. GLS line is not equipped with a GLSDV.
2. GLSDV is not tested as required in the 250.873(d) table.
3. A GLSDV has any detectable leakage.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each line inspected

P-367 **IS EACH SUBSEA GAS LIFT INJECTION POINT EQUIPPED WITH A GAS LIFT INJECTION VALVE (GLIV)?**

Authority: 30 CFR 250.873(b)(1)(ii) **Enforcement Actions: C**
30 CFR 250.873(b)(2)
30 CFR 250.873(b)(3)(iii)
30 CFR 250.873(d)

INSPECTION PROCEDURE
1. Verify that each subsea gas lift injection point is protected by a GLIV.
2. Verify that GLIV is operable by testing in accordance with the table 30 CFR 250.873 (d).

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC if
1. Subsea gas lift injection point is not equipped with a GLIV.
2. The GLIV is not operable.

INSPECTION COUNT/INC
Enter one item checked/issue one INC for each GLIV inspected

P-369 **IS EACH DEPARTING WATER INJECTION LINE EQUIPPED WITH A WATER INJECTION SHUT DOWN VALVE (WISDV)?**

Authority: 30 CFR 250.874(b) **Enforcement Actions: C**
30 CFR 250.874(g)(1)

INSPECTION PROCEDURE
1. Inspect each departing water injection line to verify that it is equipped with a WISDV.
2. Actuated by the PSH and PSL located upstream of the WISDV.
3. Verify that each WISDV is operable by testing in accordance with the National PINC List Appendices, Appendix 8.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC if:
1. W/I line is not equipped with a WISDV.
2. WISDV not located as required.
3. A WISDV has any detectable leakage.

INSPECTION COUNT/INC
Enter one item checked/issue one INC for each line inspected

HEADERS

P-380 **IS EACH HEADER EQUIPPED WITH A PSH?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**
30 CFR 250.852

INSPECTION PROCEDURES:

1. Verify that each header is protected by PSH sensor:
   A. Located on the header upstream of any block valve.
   B. Installed to sense pressure throughout the header.
2. Verify that the PSH set and trip pressure test tolerance is in accordance with API RP 14 C, Appendix D.3.2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. Header is not equipped with a PSH sensor.
2. PSH sensor is not located properly.
3. PSH sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/ issue one INC for each header inspected

P-381 **IS EACH HEADER EQUIPPED WITH A PSL?**

Authority: 30 CFR 250.841(a) **Enforcement Actions: C**
30 CFR 250.852

INSPECTION PROCEDURES:

1. Verify that each header is protected by PSL sensor:
   A. Located on the header upstream of any block valve.
   B. Installed to sense pressure throughout the header.
2. Verify that the PSL trip and set pressure test tolerance is in accordance with API RP 14 C, Appendix D.3.2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. Header is not equipped with a PSL sensor.
2. PSL sensor is not located properly.
3. PSL sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/ issue one INC for each header inspected

P-385 **IF A NECESSARY ALTERATION OR DISCONNECTION OF THE PIPELINE OR UMBILICAL OF ANY SUBSEA WELL AFFECTS THE OPERATORS ABILITY TO MONITOR CASING PRESSURE OR TO TEST ANY SUBSEA VALVES OR EQUIPMENT, DID THE OPERATOR NOTIFY THE APPROPRIATE DISTRICT OFFICE AT LEAST 48 HOUR IN ADVANCE AND SUBMIT A REPAIR OR REPLACEMENT PLAN?**

Authority: 30 CFR 250.831 **Enforcement Actions: W**
30 CFR 250.880(a)(3)
30 CFR 250.880(d)(2)(i)

Note: Altering or disconnecting of the pipeline or umbilical must not be performed until a plan for monitoring casing pressure or testing any subsea valve or equipment is approved.

INSPECTION PROCEDURE:

Verify that the District Manager has received and approved a plan for monitoring casing pressure or testing any subsea valve or equipment.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if The District Manager has not approved a plan for monitoring casing pressure or testing any subsea valve or equipment.

INSPECTION COUNT/INC COUNT:

Enter one item checked/ issue one INC for each well inspected

P-390 **DID THE OPERATOR FOLLOW THE VALVE CLOSURE TIMING TABLE FOR ELECTRO-HYDRAULIC CONTROL SYSTEMS?**

Authority: 30 CFR 250.838(b) **Enforcement Actions: W**

INSPECTION PROCEDURE:

Verify that the operator followed the valve closure timing table for Electro-Hydraulic control systems listed in 30 CFR 250.838(b).

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the operator did not follow the valve closure timing table for Electro-Hydraulic control systems listed in 30 CFR 250.838(b).

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each control system inspected

P-391 **DID THE OPERATOR FOLLOW THE VALVE CLOSURE TIMING TABLE FOR ELECTRO-HYDRAULIC CONTROL SYSTEMS WITH LOSS OF COMMUNICATIONS?**

Authority: 30 CFR 250.838(d) **Enforcement Actions: W**

INSPECTION PROCEDURE:

Verify that the operator followed the valve closure timing table for Electro-Hydraulic control systems with loss of communications listed in 30 CFR 250.838(d).

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the operator did not follow the valve closure timing table for Electro-Hydraulic control systems with loss of communications listed in 30 CFR 250.838(d).

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each control system inspected

P-392 **DID THE OPERATOR FOLLOW THE VALVE CLOSURE TIMING TABLE FOR DIRECT HYDRAULIC CONTROL SYSTEMS?**

Authority: 30 CFR 250.839(b) **Enforcement Actions: W**

INSPECTION PROCEDURE:

Verify that the operator followed the valve closure timing table for Direct Hydraulic control systems listed in 30 CFR 250.839(b).

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the operator did not follow the valve closure timing table for Direct Hydraulic control systems listed in 30 CFR 250.839(b).

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each control system inspected

WELLHEAD AND FLOWLINES

P-402 **IS THE PSH ON EACH FLOWLINE SEGMENT SET NO HIGHER THAN 15 PERCENT OR 5 PSI, WHICHEVER IS GREATER, ABOVE THE HIGHEST PRESSURE IN THE OPERATING RANGE AND BELOW THE SITP OR THE GAS-LIFT SUPPLY PRESSURE?**

Authority: 30 CFR 250.852(b)(1) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Inspect each flowline segment to verify that it is equipped with a PSH sensor in accordance with API RP 14C.
2. Conduct actuation test of each PSH sensor in accordance with Appendix 1 and document activation pressure.
3. Verify that PSH is set no higher than 15 percent or 5 psi, whichever is greater, above the highest pressure in the operating range and below the maximum shut-in wellhead tubing pressure or the gas-lift supply pressure.

Note: The API test tolerance does apply.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Flowline segment is not equipped with a PSH sensor.
2. The PSH sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/ issue one INC for each segment inspected

P-404 **IS THE PSL ON EACH FLOWLINE SEGMENT SET NO LOWER THAN 15 PERCENT OR 5 PSI, WHICHEVER IS GREATER, BELOW THE LOWEST PRESSURE IN THE OPERATING RANGE?**

Authority: 30 CFR 250.852(b)(2) **Enforcement Actions: C**

Note: API test tolerance does apply.

INSPECTION PROCEDURES:

1. Inspect each flowline segment to verify that it is equipped with a PSL sensor in accordance with API RP 14C.
2. Conduct actuation test of each PSL sensor in accordance with Appendix 1 and document activation pressure.
3. Verify that the PSL is set no lower than 15 percent or 5 psi, whichever is greater, below the lowest pressure in the operating range.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Flowline segment is not equipped with a PSL sensor.
2. The PSL sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/ issue one INC for each segment inspected.

P-405 **IF THE MAXIMUM ALLOWABLE WP OF THE FLOWLINE IS LESS THAN THE SITP, IS A PSV, OR ADDITIONAL SSV ACTIVATED BY AN INDEPENDENT PSH, INSTALLED?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**
30 CFR 250.852(c)

INSPECTION PROCEDURES:

1. Review operator individual well records, production records and surface pressure records to identify:
   A. Those wells with a SITP that exceeds the maximum allowable working pressure of flowlines or flowline segments.
   B. Flowlines equipped with an operable PSV.
   C. Wells equipped with an additional SSV activated by an independent PSH sensor.
   D. If adequate volume exists, are flowlines equipped with an additional SSV activated by an independent PSH.
2. Document those wells open to a hydrocarbon bearing zone that exceed the maximum allowable working pressure of flowlines or flowline segments.
3. Conduct an inspection of those flowlines protected by a PSV to verify the presence of the PSV.
4. Conduct an inspection of those flowlines not protected by a PSV to verify the presence of the additional SSV and its independent PSH sensor.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. Operator records are not available in the nearest field office.
2. Operator records do not identify all wells that have a SITP greater than the maximum allowable working pressure of the flowline.
3. PSV or SSV with an independent PSH sensor is not installed on a flowline when the maximum allowable working pressure is less than SITP.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each flowline inspected

P-406 **IS AN OPERABLE FSV INSTALLED IN THE FINAL FLOWLINE SEGMENT?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**
30 CFR 250.852(g)

DEFINITIONS:

1. Flowlines - Transport hydrocarbons from the well head to the first down-stream process component.
2. Flowline segment - Any portion of a flowline that has an assigned operating pressure different from other portions of the same flowline:
   A. Initial - Beginning at well head.
   B. Intermediate - Segment that experiences a reduction in operating pressure due to choke restrictions.
   C. Final - Terminating at the first downstream process component.

INSPECTION PROCEDURES:

1. Verify that final flowline segment is protected by FSV located so that the entire segment is protected from back flow.
2. Verify that FSV is operable by testing in accordance with Appendix 5.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Final flowline segment is not equipped with a FSV.
2. The FSV is not located properly.
3. The FSV is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each flowline inspected

P-407 **DOES THE WELLHEAD, TREE, AND RELATED EQUIPMENT HAVE A PRESSURE RATING GREATER THAN THE SITP?**

Authority: 30 CFR 250.518(d) - Completion **Enforcement Actions: C**
30 CFR 250.619(d) - Workover

INSPECTION PROCEDURE:
Inspect the wellhead, tree, and related equipment to verify that they have a pressure rating greater than the SITP.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (**C**) INC when the component does not have a pressure rating greater than the anticipated/actual surface pressure.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each segment inspected.

P-408 **DOES EACH WELLHEAD SSV, USV, BSDV AND ITS ACTUATOR CONFORM TO THE CERTIFICATION REQUIREMENTS IN 30 CFR 250.801 through 802?**

Authority: 30 CFR 250.801 **Enforcement Actions: C**
30 CFR 250.802

DEFINITION: Re-manufacture - Any activity involving disassembly, re-assembly, and testing of SSV, USV or BSDV equipment or any item thereof, with or without the replacement of qualified parts where machining, welding, heat treating, or other manufacturing operation is employed.

Notes:
1. If a non-certified SPPE is already in service, it may remain in service on that well unless it requires offsite repair, re-manufacturing, or any work. Then the operator must replace it with a SPPE certified valve.
2. Compliance with 30 CFR 250.801(a)(2) for requirements related to boarding shutdown valves (BSDVs) and their actuators as SPPE is deferred until September 7, 2017.

INSPECTION PROCEDURES:
1. Inspect individual well file to determine if the BSDV, SSV or USV and its associated actuator is certified pursuant to ANSI/API Spec. QI, or is approved under BSEE's approved quality program. If approved under BSEE's approved quality program, operator must have received BSEE approval.
2. Inspect individual well file to determine if a noncertified BSDV, SSV, USV, or actuator already in installed has not been sent offsite for repair, re-manufacturing, or any hot work such as welding. If it has been, the noncertified valve must be replaced with a certified valve.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC for each BSDV, SSV, USV, or actuator if:
1. It is not a certified valve pursuant to ANSI/API Spec. QI or is not approved under BSEE's approved quality program.
2. A noncertified valve was sent offsite for repair, re-manufacturing, or any hot work such as welding, but was not replace with a certified valve.

INSPECTION COUNT/INC COUNT:
Enter one item checked/ issue one INC for each completion inspected

P-412 **IS EACH WELLHEAD COMPLETION EQUIPPED WITH A MINIMUM OF ONE MASTER VALVE AND AN OPERABLE SSV LOCATED ABOVE THE MASTER VALVE, IN THE VERTICAL RUN OF THE TREE?**

Authority: 30 CFR 250.518(d) – Completion **Enforcement Actions: C**
30 CFR 250.619(d) – Work over
30 CFR 250.820 – SSV Detectable Leakage
30 CFR 250.834 – USV Detectable Leakage

INSPECTION PROCEDURES:
1. Visually inspect the wellhead tree to verify that it is equipped with an SSV located above the master valve in the vertical run of the tree.
2. Verify that each SSV is operable by testing in accordance with Appendix 8.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC when:
1. The wellhead tree is not equipped with an SSV located above the master valve in the vertical run of the tree.
2. An SSV has any detectable leakage.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each completion inspected

TUBING AND WELLHEAD EQUIPMENT

DEFINITIONS:

1. "A" annulus: the annulus designation between production tubing and production casing

2. "B" annulus: the annulus designation between the production casing and next outer casing.. The letter designation continues in sequence for each and every annular space encountered between casing strings up to and including the surface casing and conductor casing strings.

3. Conductor casing – provides structural support for the well, wellhead and completion equipment, and often provides hole stability for initial drilling operations. This casing string is not designed for pressure containment, but upon completion of the well, it may have a casing head, therefore, it may be capable of containing low annular pressures. This casing is set prior to encountering any hydrocarbons at a depth where the fracture gradient will allow for an increase in mud density and is cemented to the surface or mudline. For subsea hybrid wells, the low pressure subsea wellhead is normally installed on this casing string.

4. Drive/jet pipe: Supports unconsolidated deposits and provides hole stability for initial drilling operations. This first string set and provides no pressure containment. This string also provides structural support to the well system.

5. Intermediate Casing: Casing is set when geological characteristics or wellbore conditions indicate downhole protection is needed or to prevent loss of circulation by casing off weaker formation. Multiple intermediate casing strings can be run in a single well.

6. Liner Casing: a casing string suspended near the bottom end of previous strings using a liner hangar.

7. Production Casing: Casing that is the inner most string of casing in the well. Production fluid enters the casing below the production packer and continues to the surface through the production string. At a minimum, the production casing will be rated for the maximum anticipated pressure that may be encountered from the production zone.

8. Production Liner : A liner that is the innermost string in which the productive zones are completed. The casing in which the production liner is hung off is usually referred to as the production casing.

9. Production Riser: The casing string rising from the seafloor to the wellhead on fixed platforms, or the casing strings attached to the subsea wellhead rising from the seafloor to the surface wellhead on hybrid wells.

10. Production string (or Completion String): The production string consists primarily of production tubing, but also includes additional components such as the surface – controlled subsurface safety valve (SCSSV, gas lift mandrels, chemical injections and instruments ports, landing nipples, and packer or packer seals assemblies. The production string runs inside the production casing and used to conduct production fluids to the surface.

11. Production Tubing: Tubing that is run inside the production casing and used to convey produced fluids from the hydrocarbon-bearing formation to the surface. Tubing may also be used for injection. In hybrid wells, for example, tubing is used as a conduit for gas for artificial lift below a mud line pack-off tubing hangar to isolate the gas lift pressure from the production riser.

12. Surface Casing: Casing run inside the conductor casing to protect shallow water zones and weaker formations and may be cemented within the conductor string and is often cemented back to the mud line. The surface wellhead is normally installed on this string for surface wells.

13. Structural Pipe Casing Strings: Casing strings used to facilitate the drilling of the well, but not need for pressure containment after the well has been drilled. Support unconsolidated sediments and provide whole stability for initial drilling operations, axial support for casing loads and bending loads from the subsea wellhead.

P-413 **IS EACH TREE INSTALLED EQUIPPED WITH EQUIPMENT TO MONITOR THE CASING PRESURE ACCORDING TO THE FOLLOWING CHART?**
Authority: 30 CFR 250.518 (b) **Enforcement Actions: W**

If you have....	You must equip....	So you can monitor....
(1) Fixed platform wells,	The wellhead,	All annuli (A, B, C, D, etc., annuli).
(2) Subsea wells,	The tubing head,	The production casing annulus (A annulus).
(3) Hybrid* wells,	The surface wellhead,	All annuli at the surface (A and B riser annuli). If the production casing below the mudline and the production casing riser above the mudline are pressure isolated from each other, provisions must be made to monitor the production casing below the mudline for casing pressure.

* Characterized as a well drilled with a subsea wellhead and completed with a surface casing head, a surface tubing head, a surface tubing hanger, and a surface Christmas tree.

INSPECTION PROCEDURES:

1. Visually inspect that each fixed platform well wellhead can monitor all annuli (A, B, C, D, etc. annuli)
2. Visually inspect that each subsea well at the tubing head is equipped to monitor the production casing annulus (A annulus).
3. Visually inspect that each Hybrid wells are equipped at the surface wellhead to monitor all annuli at the surface (A and B riser annuli). If the production casing below the mudline and the production casing riser above the mudline are pressure isolated from each other, provisions must be made to monitor the production casing below the mudline for casing pressure.
4. Review the operator's records to ascertain whether or not sustained casing pressure was observed in the past.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when wells on fixed platforms, subsea wells, hybrid wells or not equipped to monitor casing pressure.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each well inspected

CASING PRESSURE MANAGEMENT

P-414 **IS THE OPERATOR MONITORING CASING PRESSURE FOR EACH WELL ACCORDING TO THE FOLLOWING TABLE?**
Authority: 30 CFR 250.520 **Enforcement Actions: W**

If you have…	You must monitor	With a minimum one pressure data point recorded per…
(a) Fixed platform wells,	Monthly	Month for each casing
(b) Subsea well,	Continuously,	Day for the production Casing
(c) Hybrid well*,	Continuously,	Day for each riser and/or the production casing
(d) Well operating under a casing pressure request on a manned fixed platform	Daily,	Day for each casing
(e) Wells operating under a casing pressure request on an unmanned platform,	Weekly,	Week for each casing

*Characterized as a well drilled with a subsea wellhead and completed with a surface casing head, a surface tubing head, a surface tubing hanger, and a surface Christmas tree.

INSPECTION PROCEDURES:
Verify the operator's records:
1. For fixed platform wells are monitored monthly with a minimum of one pressure point recorded per month for each casing.
2. For subsea wells are monitored continuously with a minimum of one pressure point recorded per day for the production casing.
3. For hybrid wells are monitored continuously with a minimum of one pressure point recorded per day for each riser and/or the production casing.
4. For wells operating under a casing pressure request on a manned fixed platform, are monitored daily with a minimum of one pressure point recorded per day for each casing.
5. For wells operating under a casing pressure request on an unmanned fixed platform, are monitored weekly with a minimum of one pressure point recorded per week for each casing.

IF NONCOMPLIANCE EXISTS:
Issue a Warning (W) INC when the operator is not recording the casing pressure for:
1. For fixed platform wells are monitored monthly with a minimum of one pressure point recorded per month for each casing.
2. For subsea wells are monitored continuously with a minimum of one pressure point recorded per day for the production casing.
3. For hybrid wells are monitored continuously with a minimum of one pressure point recorded per day for each riser and/or the production casing.
4. For wells operating under a casing pressure request on a manned fixed platform, are monitored daily with a minimum of one pressure point recorded per day for each casing.
5. For wells operating under a casing pressure request on an unmanned fixed platform, are monitored weekly with a minimum of one pressure point recorded per week for each casing.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each well inspected

P-415 **ARE ALL CASING DIAGNOSTIC TESTS PERFORMED WITHIN 30 DAYS AFTER FIRST OBSERVING OR IMPOSING CASING PRESSURE ACCORDING TO THE FOLLOWING CHART?**
Authority: 30 CFR 250.521 **Enforcement Actions: W**

If you have a...	You must perform a casing diagnostic test if...
(1) Fixed platform well,	The casing pressure is greater than 100 psig.
(2) Subsea well,	The measurable casing pressure is greater than the external hydrostatic pressure plus 100 psig measured at the subsea wellhead. Hydrostatic pressure = (.052 x 8.6 x water depth)
(3) Hybrid well*,	A riser or the production casing pressure is greater than 100 psig measured at the surface.

*Characterized as a well drilled with a subsea wellhead and completed with a surface casing head, a surface tubing head, a surface tubing hanger, and a surface christmas tree.

INSPECTION PROCEDURES:
Verify the operator's records that a casing diagnostic test was performed with the 30 day after first observing or imposing casing pressure:
1. For fixed platform well where the casing pressure is greater than 100 psig.
2. For subsea well where the measurable casing pressure is greater than the external hydrostatic pressure plus 100 psig.
3. For hybrid well where a riser or the production casing pressure is greater than 100 psig measured at the surface.

IF NONCOMPLIANCE EXISTS:
Issue a Warning (W) INC when the operator has not performed a diagnostic test within the 30 day after first observing or imposing casing pressure:
1. For fixed platform well where the casing pressure is greater than 100 psig.
2. For subsea well where the measurable casing pressure is greater than the external hydrostatic pressure plus 100 psig.
3. For hybrid well where a riser or the production casing pressure is greater than 100 psig measured at the surface.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each well inspected

P-416 **DID THE OPERATOR REPEAT CASING DIAGNOSTIC TESTING WHEN REQUIRED?**
Authority: 30 CFR 250.523 **Enforcement Actions: W**
INSPECTION PROCEDURE:
Casing diagnostic testing must be repeated in accordance with the following table:

When…	You must repeat diagnostic testing…
(a) Your casing pressure request approved term has expired,	Immediately.
(b) Your well, previously on gas lift, has been shut-in or returned to flowing status without gas lift for more than 180 days,	Immediately on the production casing (A annulus). The production casing (A annulus) of wells on active gas lift are exempt from diagnostic testing.
(c) Your casing pressure request becomes invalid,	Within 30 days.
(d) A casing or riser has an increase in pressure greater than 200 psig over the previous casing diagnostic test,	Within 30 days.
(e) After any corrective action has been taken to remediate undesirable casing pressure, either as a result of a casing pressure request denial or any other action,	Within 30 days.
(f) Your fixed platform well production casing (A annulus) has pressure exceeding 10 percent of its minimum internal yield pressure (MIYP), except for production casings on active gas lift,	Once per year, not to exceed 12 months between tests.
(g) Your fixed platform well's outer casing (B, C, D, etc., annuli) has a pressure exceeding 20 percent of its MIYP,	Once every 5 years, at a minimum.

INSPECTION PROCEDURES:
Verify through records that a casing diagnostics test was:
1. Performed immediately after the casing pressure approved term expired.
2. Repeated immediately on the production casing (A annulus) when a well, previously on gas lift, has been shut-in or returned to flowing status without gas lift for more than 180 days,
3. Repeated within 30 days after the casing pressure request became invalid.
4. Repeated within 30 days when the casing or riser had an increase in pressure greater than 200 psig over the previous casing diagnostic test.
5. Repeated within 30 days after a corrective action was taken to remediate undesirable casing pressure.
6. Repeated once a year and did not exceed 12 months between test when the A annulus had pressure exceeding 10 percent of its minimum internal yield pressure (MIYP).

IF NONCOMPLIANCE EXISTS:
Issue a warning (W) INC if the operator has not performed
1. A casing diagnostic test immediately after the casing pressure approved term expired.
2. The required casing diagnostic test immediately.
3. A casing diagnostic test within 30 days after the casing pressure request became invalid.
4. A casing diagnostic test within 30 days after the casing or riser had an increase in pressure greater than 200 psig over the previous casing diagnostic test.
5. A casing diagnostic test within the 30 days required.
6. A casing diagnostic test as required.
7. A casing diagnostic test once every 5 years as required.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each diagnostic test not conducted

P-417 **DOES THE OPERATOR RETAIN RECORDS OF CASING PRESSURES AND DIAGNOSTICS TESTS AS REQUIRED?**

Authority: 30 CFR 250.524 **Enforcement Actions: W**

INSPECTION PROCEDURES:

Verify that:

1. Records of casing pressure and diagnostic tests are kept at the field office nearest the well for a minimum of 2 years.
2. Last casing diagnostic test for each casing or riser is retained at the field office nearest the well until the well is abandoned.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records of casing pressures and diagnostic tests are not kept at the nearest field office.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each casing record not retained

P-418 **DID THE OPERATOR TAKE ACTION BASED ON THE RESULTS FROM THEIR CASING DIAGNOSTIC TEST?**

Authority: 30 CFR 250.525 **Enforcement Actions: W**

INSPECTION PROCEDURES:

Verify if casing diagnostic test contain any of the following conditions:

1. Any fixed platform well with a casing pressure exceeding its maximum allowable wellhead operating pressure (MAWOP);
2. Any fixed platform well with a casing pressure that is greater than 100 psig and that cannot bleed to 0 psig through a ½ inch needle valve within 24 hours, or is not bled to 0 psig during a casing diagnostic test;
3. Any well that has demonstrated tubing/casing, tubing/riser, casing/casing, riser/casing, or riser/riser communication;
4. Any well that has sustained casing pressure (SCP) and is bled down to prevent it from exceeding its MAWOP, except during initial startup operations described in § 250.522;
5. Any hybrid well with casing or riser pressure exceeding 100 psig; or
6. Any subsea well with a casing pressure 100 psig greater than the external hydrostatic pressure at the subsea wellhead.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that operator did not take action after conducting their casing diagnostic test for any of the items listed above.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each well inspected

P-419 **DID THE OPERATOR SUBMIT A NOTIFICATION OF CORRECTIVE ACTION OR A CASING PRESSURE REQUEST WITHIN 14 DAYS AFTER PERFORMING A CASING DIAGNOSTIC TEST REQUIRING ACTION UNDER 30 CFR 250.525?**

AUTHORITY: 30 CFR 250.526 **Enforcement Actions: W**

Casing diagnostic test requires action in accordance with the following table:

You must submit either…	To the appropriate…	And it must include…	You must also…
(a) a notification of corrective action; or,	District Manager and copy the Regional Supervisor, Field Operations,	Requirements under 250.527,	Submit an Application for Permit to Modify or Corrective Action Plan within 30 days of the diagnostic test.
(b) a casing pressure request,	Regional Supervisor, Field Operations,	Requirements under 250.528.	

INSPECTION PROCEDURE:

Verify through records that the operator submitted a notification of corrective action or a casing pressure request within 14 days after performing a casing diagnostic test requiring action under 30CFR250.525.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that the operator did not make notification of corrective action or a casing pressure request within 14 days after performing a casing diagnostic test requiring action under 30CFR250.525.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each well inspected

PRESSURE VESSELS

P-422 **IS EACH PRESSURE VESSEL EQUIPPED WITH AN OPERABLE LSH?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**
30 CFR 250.850
30 CFR 250.853(d)

INSPECTION PROCEDURES:

1. Verify that each pressure vessel is protected by LSH sensor:
   A. Located to protect vessel from liquid overflow (carryover) and to shut off inflow to the pressure vessel.
   B. Installed so that test can be conducted by raising and lowering the liquid level across the level-control detector.
2. Verify that LSH is operable by testing in accordance with Appendix 2.
3. Verify that LSH is installed in an external bridle on all new installations.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Vessel is not equipped with a LSH sensor.
2. The LSH sensor is not located properly.
3. The LSH is not operable.
4. The LSH is not installed in an external bridle on new installations.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each pressure vessel inspected

P-423 **IS EACH PRESSURE VESSEL EQUIPPED WITH AN OPERABLE LSL (OIL)?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**
30 CFR 250.850
30 CFR 250.853(d)

INSPECTION PROCEDURES:

1. Verify that each pressure vessel is protected by LSL sensor:
   A. Located to protect oil liquid outlet from gas blow-by.
   B. That will cause the shut off of inflow to the pressure vessel or the closure of the liquid outlet.
   C. Installed so that test can be conducted by raising and lowering the liquid level across the level-control detector.
2. Verify that LSL is operable by testing in accordance with Appendix 2.
3. Verify that LSL is installed in an external bridle on all new installations.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Vessel is not equipped with a LSL sensor.
2. The LSL sensor is not located properly.
3. The LSL is not operable.
4. The LSL is not installed in an external bridle on new installations.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each pressure vessel inspected

P-424 **IS EACH PRESSURE VESSEL EQUIPPED WITH AN OPERABLE LSL (WATER)?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**
30 CFR 250.850
30 CFR 250.853(d)

INSPECTION PROCEDURES:

1. Verify that each pressure vessel is protected by LSL sensor:
   A. Located to protect water liquid outlet from oil discharge or gas blow-by.
   B. That will cause the shut off of inflow to the pressure vessel or the closure of the liquid outlet.
   C. Installed so test can be conducted by raising and lowering the liquid level across the level-control detector.
2. Verify that LSL is operable by testing in accordance with Appendix 2.
3. Verify that LSL is installed in an external bridle on all new installations.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Vessel is not equipped with a LSL sensor.
2. The LSL sensor is not located properly.
3. The LSL is not operable.
4. The LSL is not installed in an external bridle on new installations.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each pressure vessel inspected

P-426 **IS EACH PRESSURE VESSEL EQUIPPED WITH A FSV (OIL)?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**
30 CFR 250.850

INSPECTION PROCEDURE:
Verify that each pressure vessel is protected by FSV located in the oil discharge piping so that the entire line is protected from backflow.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC when:
1. Vessel is not equipped with a FSV.
2. The FSV is not located properly.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each pressure vessel inspected

P-427 **IS EACH PRESSURE VESSEL EQUIPPED WITH A FSV (WATER)?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**
30 CFR 250.850

INSPECTION PROCEDURE:
Verify that each pressure vessel is protected by FSV located in the water discharge piping so that the entire line is protected from backflow.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC when:
1. Vessel is not equipped with a FSV.
2. The FSV is not located properly.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each pressure vessel inspected

P-428 **IS EACH PRESSURE VESSEL EQUIPPED WITH A FSV (GAS)?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**
30 CFR 250.850

INSPECTION PROCEDURE:
Verify that each pressure vessel is protected by FSV located in the gas discharge piping so that the entire line is protected from backflow.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC when:
1. Vessel is not equipped with a FSV.
2. The FSV is not located properly.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each pressure vessel inspected

P-429 **IS EACH STOP VALVE BETWEEN A PSV AND A PRESSURE VESSEL LOCKED OR SEALED IN THE OPEN POSITION WHEN AN AUTHORIZED PERSON IS NOT STATIONED AT THE PRESSURE VESSEL, AS REQUIRED IN THE ASME BOILER AND PRESSURE VESSEL CODE, SECTION VIII, APPENDIX M?**

Authority: 30 CFR 250.851(a)(3)(i) **Enforcement Actions: W**

INSPECTION PROCEDURE:
Verify that, when a stop valve is located between a PSV and a pressure vessel, the stop valve is locked or sealed in the open position unless an authorized person is stationed at the pressure vessel when the stop valve is closed.

IF NONCOMPLIANCE EXISTS:
Issue a component warning (W) INC if a stop valve between a PSV and a pressure vessel is not locked or sealed in the open position and an authorized person is not stationed at the pressure vessel.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each pressure vessel inspected

P-430 **ARE PRESSURED AND FIRED VESSELS CODE STAMPED IN ACCORDANCE WITH THE ASME BOILER AND PRESSURE VESSEL CODE?**

Authority: 30 CFR 250.851(a)(1)(i) **Enforcement Actions: C**

Notes:

1. Unstamped vessels may be used only if they were specifically approved by the District Manager prior to August 30, 1988, for continued use.
2. Stamped letters and figures must be at least 5/16 inches high if stamped on the vessel and at least 5/32 inches high if stamped on a nameplate.
3. No obstructions, other than an easily removable marked cover, can interfere with reading of the ASME Code stamping.

INSPECTION PROCEDURES:

Inspect each pressure vessel to verify that it is stamped or has a nameplate permanently attached (adhesives prohibited) with the following information:

1. The ASME Boiler and Pressure Vessel Code symbol ("S", "M" or "E" for atmospheric pressure boilers, "H" for high pressure boilers, or "U" or "UM" for pressure vessels).
2. Manufacturer's name.
3. Maximum allowable working pressure when built.
4. Manufacturer's serial number.
5. Year built.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when the vessel is not stamped as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each pressure vessel inspected

P-431 **IS THE PSH ON EACH PRESSURE VESSEL SET NO HIGHER THAN 15 PERCENT OR 5 PSI, WHICHEVER IS GREATER, ABOVE THE HIGHEST PRESSURE IN THE OPERATING RANGE AND AT LEAST 5 PERCENT OR 5 PSI, WHICHEVER IS GREATER, BELOW THE PSV'S ACTIVATION PRESSURE?**

Authority: 30 CFR 250.851(b) **Enforcement Actions: C**

30 CFR 250.851(c)(1)

Note: The API test tolerance does apply.

INSPECTION PROCEDURES:

1. Inspect each pressure vessel to verify that it is equipped with a PSH sensor in accordance with API RP 14C.
2. Conduct actuation test of each PSH sensor in accordance with Appendix 1 and document activation pressure.
3. Verify that PSH is set no higher than 15 percent or 5 psi, whichever is greater, above the highest pressure in the operating range and at least 5 percent or 5 psi, whichever is greater, below the PSV's activation pressure.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Pressure vessel is not equipped with a PSH sensor.
2. The PSH sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each PSH inspected

P-433 **IS THE PSL ON EACH PRESSURE VESSEL SET NO LOWER THAN 15 PERCENT OR 5 PSI, WHICHEVER IS GREATER, BELOW THE LOWEST PRESSURE IN THE OPERATING RANGE?**

Authority: 30 CFR 250.851(b) **Enforcement Actions: C**

30 CFR 250.851(c)(2)

INSPECTION PROCEDURES:

1. Inspect each pressure vessel to verify that each is equipped with a PSL sensor in accordance with API RP 14C.
2. Conduct actuation test on pressure vessel PSL sensor in accordance with Appendix 1 and document activation pressure.
3. Verify that PSL is set no lower than 15 percent or 5 psi, whichever is greater, below the lowest pressure in the operating range.

Note: API test tolerance does apply.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Pressure vessel is not equipped with a PSL sensor.
2. The PSL sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each PSL inspected

P-434 **ARE PRESSURE VESSELS MAINTAINED, INSPECTED, RATED, REPAIRED, AND ALTERED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE AMERICAN PETROLEUM INSTITUTE'S PRESSURE VESSEL INSPECTION CODE: MAINTENANCE INSPECTION, RATING, REPAIR, AND ALTERATION API 510 (EXCEPT SECTIONS 6.5 AND 8.5), EFFECTIVE MARCH 15, 2005?**

Authority: 30 CFR 250.198 **Enforcement Actions: W/C**

INSPECTION PROCEDURE:

Verify through records and visual inspection that all pressure vessels are maintained, inspected, rated, repaired, and altered after March 15,2005 are in accordance with the applicable provisions in API 510 (except sections 6.5 and 8.5).

IF NONCOMPLIANCE EXIST:

Issue a warning (W) INC if the Inspection reveals that the operator is not maintaining, inspecting, rating, repairing and altering pressure vessels in accordance API 510 and there is no immediate threat to personnel or the environment.

Issue a component (C) shut in INC if the Inspection reveals that the operator is not maintaining, inspecting, rating, repairing and altering pressure vessels in accordance with API 510 and there is a threat to personnel or the environment.

INSPECTION COUNT/NC COUNT:

Enter one item checked/issue one INC for each pressure vessel inspected

RELIEF VALVES

P-451 **IS EACH REQUIRED PSV DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH APPLICABLE PROVISIONS OF SECTIONS I, IV, AND VIII OF THE ASME BOILER AND PRESSURE VESSEL CODE AND SET AT A PRESSURE NO HIGHER THAN THE MAXIMUM ALLOWABLE WORKING PRESSURE?**

Authority: 30 CFR 250.851(a)(3)(i) **Enforcement Actions: C**
30 CFR 250.851(a)(3)(ii)
30 CFR 250.880(c)(2)(i)

INSPECTION PROCEDURES:

1. Inspect the component to verify that it is equipped with a PSV located to sense or relieve pressure from the gas or vapor section of the vessel.
2. Conduct actuation test of PSV in accordance with Appendix 4 and document relief point.
3. Verify that PSV is set no higher than the maximum-allowable working pressure.
4. Verify that the PSV test and set pressure test tolerance is in accordance with API RP 14 C, Appendix D.3.1.
5. Verify that the PSV outlet piping is adequately sized.
6. Verify that the PSV main valve piston was lifted during test.
7. Verify that the PSV is stamped or marked in accordance with ASME Boiler and Pressure Vessel Code.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. PSV not installed.
2. PSV does not relieve as required.
3. PSV is not located as required.
4. PSV is not stamped or marked as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each PSV inspected

P-452 **IS EACH PSV AND VENT PIPED IN SUCH A WAY AS TO PREVENT FLUID FROM STRIKING PERSONNEL OR IGNITION SOURCES?**

Authority: 30 CFR 250.851(a)(3)(iii) **Enforcement Actions: C**

INSPECTION PROCEDURE:

Visually inspect each PSV and vent discharge to verify that a hazard to personnel or equipment does not exist.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when verification of a hazard to personnel or equipment exists.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each PSV inspected.

ATMOSPHERIC VESSELS

P-470 **IS EACH ATMOSPHERIC VESSEL EQUIPPED WITH AN OPERABLE LSH?**

Authority: 30 CFR 250.872 **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each atmospheric vessel is protected by LSH sensor:
   A. Located at a sufficient distance above the highest operating liquid level to prevent nuisance shutdowns but with adequate vessel volume above the LSH sensor to contain liquid inflow during shut in.
   B. For atmospheric vessels that have oil buckets, the LSH sensor must be installed to sense the level in the oil bucket.
   C. Installed so that test can be conducted by raising and lowering the liquid level across the level-control detector.
2. Verify LSH is operable by testing in accordance with Appendix 2.
3. Verify LSH is installed in an external bridle on all new installations.
4. Verify bridle design prevents different fluid densities from impacting sensor functionality.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Vessel is not equipped with a LSH sensor.
2. The LSH sensor is not located properly.
3. The LSH is not operable.
4. The LSH is not installed in an external bridle on new installations.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each atmospheric vessel inspected

P-471 **IS EACH ATMOSPHERIC VESSEL EQUIPPED WITH AN OPERABLE LSL (WATER)?**

Authority: 30 CFR 250.872(a) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each atmospheric vessel is protected by LSL sensor:
   A. Located to protect water liquid outlet from oil discharge or gas blow-by.
   B. That will cause the shut off of inflow to the vessel or the closure of the liquid outlet.
   C. Installed so that test can be conducted by raising and lowering the liquid level across the level-control detector.
2. Verify that LSL is operable by testing in accordance with Appendix 2.
3. Verify that LSL is installed in an external bridle on all new installations.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Vessel is not equipped with a LSL sensor.
2. The LSL sensor is not located properly.
3. The LSL is not operable.
4. The LSL is not installed in an external bridle on new installations.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each atmospheric vessel inspected

P-472 **IS EACH ATMOSPHERIC VESSEL EQUIPPED WITH AN OPERABLE LSL (OIL)?**

Authority: 30 CFR 250.872(a) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each atmospheric vessel is protected by LSL sensor:
   A. Located to protect oil liquid outlet from gas blow-by.
   B. That will cause the shut off of inflow to the vessel or the closure of the liquid outlet.
   C. Installed so that test can be conducted by raising and lowering the liquid level across the level-control detector.
2. Verify that LSL is operable by testing in accordance with Appendix 2.
3. Verify that LSL is installed in an external bridle on all new installations.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Vessel is not equipped with a LSL sensor.
2. The LSL sensor is not located properly.
3. The LSL is not operable.
4. The LSL is not installed in an external bridle on new installations.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each atmospheric vessel inspected.

P-474 **IS EACH ATMOSPHERIC VESSEL EQUIPPED WITH AN OPERABLE PSV AND A VENT OR TWO INDEPENDENT VENTS?**

Authority: 30 CFR 250.872(a) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each atmospheric vessel is protected from over pressure and under pressure by:
   A. A vent and PSV, or
   B. Two independent vents.
2. If PSV is used, verify that it is not isolated except while testing.
3. Verify that each vent and PSV is located on the top (highest practical elevation in the vapor section) of atmospheric vessels.
4. Verify that PSV is operable by testing in accordance with Appendix 4 or 30 CFR 250.880(c)(2)(i) as applicable.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Vessel is not equipped with two vents or PSV and vent.
2. Vents or PSV are not located properly.
3. The PSV is not operable.
4. The PSV is isolated unless for testing.

INSPECTION COUNT/INC COUNT:

Enter one item checked/ issue one INC for each atmospheric vessel inspected

P-475 **IS EACH ATMOSPHERIC VESSEL EQUIPPED WITH AN OPERABLE FLAME ARRESTER ON VENT(S)?**

Authority: 30 CFR 250.872 **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each vent on each atmospheric vessel is equipped with a flame arrester.
2. Verify that flame arrester is operable by testing in accordance with Appendix 17.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Vent is not equipped with flame arrester.
2. Flame arrester is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each atmospheric vessel inspected

FIRED AND HEATED COMPONENTS

P-520 **IS EACH FIRED COMPONENT EQUIPPED WITH AN OPERABLE PSH?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each fired component fuel supply is protected by PSH installed between the last fuel regulator and the fuel control valve.
2. Verify that PSH is operable by testing in accordance with Appendix 1.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Fuel supply is not equipped with a PSH sensor.
2. The PSH sensor is not located properly.
3. The PSH sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each fuel supply PSH inspected

P-521 **IS EACH FIRED COMPONENT EQUIPPED WITH AN OPERABLE SDV?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each fired component fuel supply is protected by SDV installed between the last fuel regulator and the fuel control valve.
2. Verify that SDV is operable by testing in accordance with Appendix 7.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Fuel supply is not equipped with a SDV.
2. The SDV is not located properly.
3. The SDV is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each SDV inspected.

P-522 **IS EACH FIRED COMPONENT EQUIPPED WITH AN OPERABLE TSL OR BSL IN THE FIRE CHAMBER?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

Note: Excess combustible vapors in the firing chamber, or ignition, could result in an explosion or rupture of the component. The TSL and BSL sensors indicate if the flame of a pilot is sufficient to immediately ignite fuel entering the fire chamber and, if not, will actuate the SDV to shut off the fuel supply.

INSPECTION PROCEDURE:

1. Verify that a TSL or a BSL is installed in the fire chamber.
2. Verify that TSL is operable by testing in accordance with Appendix 3.
3. Verify that BSL is operable by testing in accordance with Appendix 6.

Note: Special attention should be given to open flame ignition methods used to light forced and natural draft components in classified areas, with "safe and workmanlike" authority enforced accordingly.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Component not equipped with TSL or BSL.
2. The TSL or BSL is not located properly.
3. The TSL or BSL is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each component inspected

P-523 **IS EACH FIRED OR EXHAUST HEATED COMPONENT EQUIPPED WITH A TSH IN THE STACK?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each fired and exhaust heated component is protected by TSH in the stack.
2. Verify that TSH is operable by testing in accordance with Appendix 3.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Component is not equipped with a TSH.
2. The TSH is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each component inspected

P-524 **IS EACH FIRED OR EXHAUST HEATED COMPONENT EQUIPPED WITH A TSH IN THE MEDIUM OR PROCESS FLUID?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

Note: A TSH to sense medium or process fluid temperature is not required for an indirect water bath heater in atmospheric service since the maximum temperature is limited by the boiling point of the water bath.

INSPECTION PROCEDURES:

1. Verify that each fired and exhaust heated component is protected by TSH in the medium or process fluid.
2. Verify that TSH is operable by testing in accordance with Appendix 3.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (**C**) INC when:

1. Component is not equipped with a TSH.
2. The TSH is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each component inspected

P-525 **IS EACH FIRED OR EXHAUST HEATED COMPONENT EQUIPPED WITH AN LSL IN THE MEDIUM OR PROCESS FLUID?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each fired and exhaust heated component is protected by LSL in the medium or process fluid.
2. Verify that LSL is operable by testing in accordance with Appendix 2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Component is not equipped with a LSL.
2. The LSL is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each component inspected

P-526 **IS EACH NATURAL DRAFT FIRED COMPONENT EQUIPPED WITH AN INTAKE FLAME ARRESTER?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

RATIONALE:

To prevent flame emission from the fire chamber through the air intake, a flame arrester is installed in the intake.

INSPECTION PROCEDURES:

1. Verify that each air intake has a flame arrester installed.
2. Verify that flame arrester is operable by testing in accordance with Appendix 17.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Air intake is not equipped with flame arrester.
2. Flame arrester is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each component inspected

P-527 **IS EACH NATURAL DRAFT FIRED COMPONENT EQUIPPED WITH A STACK ARRESTER?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

RATIONALE:

To prevent flame and sparks emission from the exhaust stack, a stack arrester is installed.

INSPECTION PROCEDURE:

1. Verify that each stack has a flame arrester installed.
2. Verify that flame arrester is operable by testing in accordance with Appendix 17.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Stack is not equipped with flame arrester.
2. Flame arrester is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each component inspected

P-528 **IS EACH FORCED DRAFT FIRED COMPONENT EQUIPPED WITH AN OPERABLE PSL IN THE AIR INTAKE?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

RATIONALE:

Primary protection from flame emission through the air intake of a forced draft burner is to maintain normal air flow.

INSPECTION PROCEDURES:

1. Verify that each component is protected by PSL sensor installed in each air intake.
2. Verify that PSL is operable by testing in accordance with Appendix 1.
3. Verify that the PSL set and trip pressure test tolerance is in accordance with API RP 14 C, Appendix D.3.2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (**C**) INC if:

1. Component is not equipped with a PSL sensor.
2. PSL is not located properly.
3. PSL sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each component inspected

P-529 **IS EACH FORCED DRAFT FIRED COMPONENT EQUIPPED WITH AN OPERABLE PSL IN THE FUEL SUPPLY LINE?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

RATIONALE:
The PSL shuts off the fuel intake and the blower when the fuel pressure is reduced.

INSPECTION PROCEDURE:
1. Verify that each component is protected by PSL sensor installed in each fuel supply line.
2. Verify that PSL is operable by testing in accordance with Appendix 1.
3. Verify that the PSL set and trip pressure test tolerance is in accordance with API RP 14 C, Appendix D.3.2.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (**C**) INC if:
1. Component is not equipped with a PSL sensor.
2. PSL is not located properly.
3. PSL sensor does not activate as required.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each component inspected

P-530 **IS EACH FORCED DRAFT FIRED COMPONENT EQUIPPED WITH AN OPERABLE MOTOR STARTER INTERLOCK?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

RATIONALE:
A motor starter interlock is installed to ensure the air blower does not operate. This prevents the existence of an explosive air-fuel mixture.

INSPECTION PROCEDURE:
1. Verify that the component is protected by a motor starter interlock.
2. Verify that motor starter interlock is operable by testing in accordance with Appendix 16.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (**C**) INC when:
1. Component is not equipped with motor starter interlock.
2. Motor starter interlock is not operable.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each component inspected

P-531 **IS EACH DIRECT FIRED TUBE-TYPE OR EXHAUST HEATED COMPONENT EQUIPPED WITH AN OPERABLE FSL IN THE MEDIUM OR PROCESS FLUID WHEN IT IS COMBUSTIBLE?**

Authority: 30 CFR 250.850 **Enforcement Actions: C**

RATIONALE:
Low flow or no flow of media in a closed heat transfer system will cause extreme temperatures and combustion of the media.

INSPECTION PROCEDURES:
1. Verify that the FSL is installed in media outlet pipe close to the heater when using combustible media.
2. Verify that FSL is operable by testing in accordance with Appendix 14.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC when:
1. Component is not equipped with FSL.
2. The FSL is not located properly.
3. The FSL is not operable.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each component inspected

P-532 **IS EACH DIRECT FIRED TUBE-TYPE OR EXHAUST HEATED COMPONENT EQUIPPED WITH AN OPERABLE FSV IN EACH MEDIUM OUTLET PIPING?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**

INSPECTION PROCEDURE:
Verify that a FSV is installed in each medium outlet piping.

IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC for the component when any medium outlet piping is not equipped with FSV.

INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each component inspected

P-533 **IS EACH DIRECT FIRED TUBE-TYPE OR EXHAUST HEATED COMPONENT EQUIPPED WITH AN OPERABLE PSV IN EACH MEDIUM PIPING?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Inspect the component to verify that it is equipped with a PSV located:
   A. In each medium outlet piping.
   B. So that PSV cannot be isolated.
2. Conduct actuation test of PSV in accordance with Appendix 4 and document relief point.
3. Verify that PSV activates no higher than the maximum-allowable working pressure.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. The PSV not installed.
2. The PSV does not relieve as required.
3. The PSV is not located as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each PSV inspected

P-534 **HAS THE OPERATOR REMOVED, INSPECTED, REPAIRED, OR REPLACED THE FIRE TUBE FOR TUBE TYPE HEATERS EVERY 5 YEARS?**

Authority: 30 CFR 250.876 **Enforcement Actions: W/C**

Note: No later than September 7, 2018, and at least once every 5 years thereafter, the operator must have a qualified third-party remove and inspect, and then you must repair or replace, as needed, the fire tube for tube-type heaters that are equipped with either automatically controlled natural or forced draft burners installed in either atmospheric or pressure vessels that heat hydrocarbons and/or glycol.

INSPECTION PROCEDURE:

Verify that the operator has enlisted a qualified third party to remove, inspect, repair, or replace the fire tube for tube type heaters every 5 years. Tube-type heaters that are equipped with either automatically controlled natural or forced draft burners installed in either atmospheric or pressure vessels that heat hydrocarbons and/or glycol.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC when a review of records does not verify that each fire tube for tube type heaters has been removed, inspected, repaired, or replaced at the required interval, but the fire tube for tube type heaters has been removed, inspected, repaired, or replaced in the last 5 years.

Issue a component shut-in (C) INC when a review of records does not verify that each fire tube for tube type heaters has been removed, inspected, repaired, or replaced at the required interval, and the fire tube for tube type heaters has not been removed, inspected, repaired, or replaced in the last 5 years.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each fire tube inspected

STEAM GENERATORS

P-540 **IS EACH STEAM GENERATOR EQUIPPED WITH AN OPERABLE PSH OR TSH?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**

RATIONALE:

A TSH is not required on a steam generator protected by a PSH sensor to detect high pressure caused by high temperature.

Note: Normally a TSH is not installed.

INSPECTION PROCEDURES:

1. Verify that each steam generator is protected by PSH or TSH.
   A. Located to sense the gas or vapor section of the vessel.
   B. Installed to sense throughout the vessel.
2. Verify that PSH is operable by testing in accordance with Appendix 1.
3. Verify that TSH is operable by testing in accordance with Appendix 3.
4. Verify that the PSH set and test pressure test tolerance is in accordance with API RP 14 C, Appendix D.3.2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. Generator is not equipped with a PSH or TSH.
2. PSH or TSH is not located properly.
3. PSH or TSH does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each steam generator inspected

P-541 **IS EACH STEAM GENERATOR EQUIPPED WITH AN OPERABLE LSL?**
Authority: 30 CFR 250.851(a) **Enforcement Actions: C**
RATIONALE:
A LSL sensor detects a low level condition which could cause a high temperature.
INSPECTION PROCEDURES:
1. Verify that each steam generator is protected by LSL:
   A. Located to sense the water level in the vessel.
   B. That activates a fuel supply shut off.
2. Verify that LSL is operable by testing in accordance with Appendix 2.
IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC when:
1. Generator is not equipped with a LSL.
2. The LSL is not located properly.
3. The LSL is not operable.
INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each steam generator inspected

P-542 **IS EACH STEAM GENERATOR EQUIPPED WITH AN OPERABLE WATER-FEEDING DEVICE WHICH WILL AUTOMATICALLY CONTROL THE WATER LEVEL IF OPERATING AT MORE THAN 15 PSIG?**
Authority: 30 CFR 250.851(a) **Enforcement Actions: C**
INSPECTION PROCEDURES:
1. Verify that the water-feeding device will automatically control the water level on vessels with a working pressure greater than 15 psig.
2. Verify that water-feeding device is operable by testing in accordance with Appendix 19.
IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC when:
1. Steam generator is not equipped with a water-feeding device.
2. Water-feeding device is not operable.
3. Water-feeding device is not automatic.
INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each steam generator inspected

HEAT EXCHANGERS

P-550 **IS EACH HEAT EXCHANGER (SHELL-TUBE) EQUIPPED WITH TWO OPERABLE PSH'S?**
Authority: 30 CFR 250.841 **Enforcement Actions: C**
INSPECTION PROCEDURES:
Verify that each heat exchanger is protected by a PSH sensor:
1. Located on the process fluid inlet piping downstream of any block valve.
2. Located on the heat medium outlet piping upstream of any block valve.
3. Installed to sense pressure in each section of the heat exchanger.
4. Verify that the PSH set and trip pressures test tolerance are in accordance with API RP 14C, Appendix D.3.2.
IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC if:
1. Heat exchanger is not equipped with both PSH sensors.
2. PSH sensor is not located properly.
3. PSH sensor does not activate as required.
INSPECTION COUNT/INC COUNT:
Enter one item checked/issue one INC for each heat exchanger inspected.

P-551 **IS EACH HEAT EXCHANGER (SHELL-TUBE) EQUIPPED WITH TWO OPERABLE PSL'S?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each heat exchanger is protected by a PSL sensor:
   A. Located on the process fluid inlet piping downstream of any block valve.
   B. Located on the heat medium outlet piping upstream of any block valve.
   C. Installed to sense pressure in each section of the heat exchanger.
2. Verify that the PSL set and test pressure test tolerance are in accordance with API RP 14 C, Appendix D.3.2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if:

1. Heat exchanger is not equipped with both PSL sensors.
2. PSL sensor is not located properly.
3. PSL sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each heat exchanger inspected

COMPRESSORS

P-562 **IS EACH COMPRESSOR SUCTION AND INTER-STAGE SCRUBBER EQUIPPED WITH AN OPERABLE LSH?**

Authority: 30 CFR 250.858(a)(1) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each compressor suction and inter-stage scrubber is protected by LSH sensor:
   A. Located to protect vessel from liquid overflow (carryover) and to shut off inflow to the pressure vessel.
   B. Installed so that test can be conducted by raising and lowering the liquid level across the level-control detector.
2. Verify that LSH is operable by testing in accordance with Appendix 2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Compressor suction or inter-stage scrubber is not equipped with a LSH sensor.
2. The LSH sensor is not located properly.
3. The LSH is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each suction or inter-stage scrubber inspected

P-563 **IS EACH COMPRESSOR SUCTION AND INTER-STAGE SCRUBBER EQUIPPED WITH AN OPERABLE LSL?**

Authority: 30 CFR 250.858(a)(1) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each compressor suction and inter-stage scrubber is protected by LSL sensor:
   A. Located to protect vessel from liquid overflow (carryover) and to shut off inflow to the pressure vessel.
   B. Installed so that test can be conducted by raising and lowering the liquid level across the level-control detector.
2. Verify that LSL is operable by testing in accordance with Appendix 2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Compressor suction or inter-stage scrubber is not equipped with a LSL sensor.
2. The LSL sensor is not located properly.
3. The LSL is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each suction or inter-stage scrubber inspected

P-567 **IS EACH FINAL STAGE DISCHARGE EQUIPPED WITH A FSV OUTSIDE OF BUILDING?**

Authority: 30 CFR 250.841 **Enforcement Actions: C**

INSPECTION PROCEDURE:

Verify that each final stage discharge is protected by FSV located so that the compressor is protected from back flow.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (**C**) INC when:

1. Final stage discharge is not equipped with a FSV.
2. The FSV is not located properly.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each compressor inspected

P-569 **IS EACH FINAL STAGE DISCHARGE EQUIPPED WITH AN AUTOMATIC BDV IF 1000 HP OR GREATER?**

Authority: 30 CFR 250.858(a)(4) **Enforcement Actions: C**

INSPECTION PROCEDURE:

Verify that each final stage discharge on a compressor of 1,000 HP (746 kilowatts) or greater is protected by automatic BDV located on compressor discharge piping.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Final stage discharge is not equipped with an automatic BDV.
2. The BDV is not located properly.
3. The BDV in not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each compressor inspected.

P-570 **IS EACH COMPRESSOR CYLINDER OR CASE PROTECTED BY A TSH?**

Authority: 30 CFR 250.858(a)(2) **Enforcement Actions: C**

INSPECTION PROCEDURES:

1. Verify that each compressor is protected by TSH located on discharge piping of each compressor cylinder or case discharge.
2. Verify that TSH is operable by testing in accordance with Appendix 3.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (**C**) INC when:

1. The TSH is not located as required.
2. The TSH is not operable.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each compressor inspected.

P-571 **DO THE AUTOMATIC SDV'S INSTALLED IN COMPRESSOR SUCTION AND FUEL GAS PIPING ACTUATED BY THE PSH, PSL, AND LSH INSTALLED ON THE COMPRESSOR SUCTION AND INTER-STAGE SCRUBBERS ALLOW EACH COMPRESSOR UNIT AND ASSOCIATED VESSELS TO BE ISOLATED FROM ALL INPUT SOURCES?**

Authority: 30 CFR 250.858(a)(3) **Enforcement Actions: C**

INSPECTION PROCEDURE:

Verify that the automatic SDV's installed in suction or fuel gas lines can isolate each compressor unit and associated vessels from all input sources.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC:

1. When SDV's installed in the suction and fuel gas lines cannot isolate each compressor unit and associated vessels from all input sources.
2. The SDV does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each compressor suction and fuel gas line inspected

P-572 **IS EACH AUTOMATIC SDV INSTALLED IN COMPRESSOR SUCTION AND FUEL GAS PIPING ALSO ACTUATED BY THE SHUTDOWN OF THE PRIME MOVER?**

Authority: 30 CFR 250.858(a)(3) **Enforcement Actions: C**

INSPECTION PROCEDURE:

Verify each automatic SDV installed in a suction or fuel gas line is actuated by the shutdown of the prime mover.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when SDV installed in the suction and fuel gas line is not actuated by a shutdown of the prime mover.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each SDV inspected

P-573 **IS GAS-WELL GAS, AFFECTED BY THE CLOSURE OF THE AUTOMATIC SDV ON COMPRESSOR SUCTION, EITHER DIVERTED TO THE PIPELINE OR SHUT-IN AT THE WELLHEAD?**

Authority: 30 CFR 250.858(a)(3) **Enforcement Actions: C**

INSPECTION PROCEDURES:

Inspect to verify that gas-well gas affected by the closure of the automatic SDV on compressor suction is:

1. Diverted to the pipeline, or
2. Shut-in at the well head

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (**C**) INC when gas-well gas affected by the closure of the automatic SDV on compressor suction is not diverted to the pipeline or not shut-in at the wellhead.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each gas well inspected.

P-574 **IS THE PSH ON EACH COMPRESSOR SUCTION, INTER-STAGE SCRUBBER, AND FINAL STAGE DISCHARGE SET NO HIGHER THAN 15 PERCENT OR 5 PSI, WHICHEVER IS GREATER, ABOVE THE HIGHEST PRESSURE IN THE OPERATING RANGE AND AT LEAST 5 PERCENT OR 5 PSI, WHICHEVER IS GREATER, BELOW THE PSV'S ACTIVATION PRESSURE?**

Authority: 30 CFR 250.858 **Enforcement Actions: C**

Notes:

1. The PSH and PSV shall be located upstream of the cooler to prevent overpressure from a blockage or freezing problem.
2. The API test tolerance does apply.

INSPECTION PROCEDURES:

1. Inspect each compressor suction, inter-stage scrubber, and final stage discharge to verify that each is equipped with a PSH sensor.
2. Conduct actuation test on compressor suction, inter-stage scrubber, and final stage discharge PSH sensor in accordance with Appendix 1 and document activation pressure.
3. Verify that PSH is set no higher than 15 percent or 5 psi, whichever is greater, above the highest pressure in the operating range and at least 5 percent or 5 psi, whichever is greater, below the PSV's activation pressure.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Compressor suction, inter-stage scrubber, or final stage discharge are not equipped with a PSH sensor.
2. PSH is not located properly.
3. The PSH sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each PSH inspected.

P-576 **IS THE PSL ON EACH COMPRESSOR SUCTION, INTER-STAGE SCRUBBER, AND FINAL STAGE DISCHARGE SET NO LOWER THAN 15 PERCENT OR 5 PSI, WHICHEVER IS GREATER, BELOW THE LOWEST PRESSURE IN THE OPERATING RANGE?**

Authority: 30 CFR 250.858 **Enforcement Actions: C**

Note: The API test tolerance does apply.

INSPECTION PROCEDURES:

1. Inspect each compressor suction, inter-stage scrubber, and final stage discharge to verify that each is equipped with a PSL sensor.
2. Conduct actuation test on compressor suction, inter-stage scrubber, and final stage discharge PSL sensor in accordance with Appendix 1 and document activation pressure.
3. Verify that PSL is set no lower than 15 percent or 5 psi, whichever is greater, below the lowest pressure in the operating range.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Compressor suction, inter-stage scrubber, and final stage discharge is not equipped with a PSL sensor.
2. The PSL is not located properly.
3. The PSL sensor does not activate as required.

INSPECTION COUNT/INC COUNT:

Enter one item checked/issue one INC for each PSL inspected.

TURRETS

P-580 **IS EACH FLOATING PRODUCTION FACILITY EQUIPPED WITH AN AUTO SLEW (AS) SYSTEM?**

Authority: 30 CFR 250.854(a) **Enforcement Actions: C**

Note: Only applies to FPU's that use Dynamic Positioning for station keeping.

INSPECTION PROCEDURE:

1. Inspect each turret/buoy installed on a FPU to verify it has an AS system.
2. Verify the AS system has been integrated in to the process safety system allowing for automatic shut-in of the production process, including the sources (subsea wells, subsea pumps, etc.) and releasing of the buoy.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if FPU not equipped with an AS system.

INSPECTION COUNT/INC

Enter one item checked/issue one INC for each facility inspected

P-581 **IS EACH FLOATING PRODUCTION FACILITY EQUIPPED WITH A SWIVEL STACK LEAK DETECTION SYSTEM?**

Authority: 30 CFR 250.854(b) **Enforcement Actions: C**

Note: Normally a PSH or a LSH.

INSPECTION PROCEDURES:

1. Verify that each portion of the swivel stack containing hydrocarbons is equipped with a seal leak detection system.
2. If equipped with a PSH, verify that the PSH set pressure tolerance for set pressures greater than 5 psi is plus or minus 5 percent or 5 psi, whichever is greater as required by API RP 14C, Appendix D.3.2.
3. If equipped with a LSH, verify that the LSH is operable by testing in accordance with the National PINC List Appendices, Appendix 2.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when:

1. Swivel stack not equipped with a leak detection system.
2. The PSH does not activate as required or the LSH is not operable.

INSPECTION COUNT/INC

Enter one item checked/issue one INC for each facility inspected